

AN ORDINANCE **9 7 5 6 8**

AMENDING CHAPTER 35, UNIFIED DEVELOPMENT CODE, OF THE CITY CODE OF SAN ANTONIO, TEXAS, BY CORRECTING CLERICAL AND FORMATTING ITEMS; INCLUDING PROVISIONS INADVERTENTLY OMITTED; CLARIFYING ITEMS; AMENDING DEFINITIONS; MAKING MINOR AMENDMENTS; PROVIDING AN EFFECTIVE DATE; AND PROVIDING FOR SEVERANCE.

* * * * *

WHEREAS, the San Antonio City Council adopted the revised Unified Development Code (UDC) on May 3, 2001; and

WHEREAS, it was anticipated that in the adoption of the revised UDC, a methodology would be necessary to address errors, omissions and implementation difficulties; and

WHEREAS, the Unified Development Code Technical Advisory Committee was created to recommend substantive and procedural changes in the revised UDC to the City Council; and

WHEREAS, the Unified Development Code Technical Advisory Committee has recommended that various changes be made to the UDC; and

WHEREAS, the Zoning Commission has recommended approval of those amendments pertaining to zoning issues; and

WHEREAS, the Planning Commission has recommended approval of those amendments pertaining to planning issues; **NOW THEREFORE**,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:

SECTION 1. The City Code of San Antonio, Texas is hereby amended by adding the language that is underlined (added) and deleting the language that is stricken (~~deleted~~) to the existing text as set forth in this Ordinance.

SECTION 2. Chapter 35 of the City Code of San Antonio, Texas is hereby amended as follows:

Chapter 35, Article II, Section 35-204(c) and 35-204(o) are amended as follows:

35-204 *Commercial Center*

* * * * *

(c) *Size And Location Of Site*

- (1) A Commercial Center may be located at the intersection of any of the Street classifications and within the Zoning Districts as set forth in Table 204-1 ~~203-1~~. In Table

204-1 ~~203-1~~, an “asterisk” indicates that a Commercial Center may be established as of right (unless otherwise indicated below) at the intersection of the Street Classifications listed in Column (A) and in the Zoning District designated in Columns (B) through (H). A dash (“—”) indicates that the Commercial Center is not permitted at that location. An “S” indicates that a Commercial Center may be permitted only upon approval of a Specific Use Permit.

- (2) Notwithstanding the provisions of Table 204-1 ~~203-1~~, a Commercial Center may not be established as a matter of right at a location permitted in Table 204-1 ~~203-1~~ which is outside of and area designated for commercial uses in a Neighborhood Plan. A Commercial Center in such areas may be established upon the approval of a Specific Use Permit.

Table 204-1
Location of Commercial Centers

(A) Street Classification	(B) RP, RE, R-20	(E) R-6, RM-6, R-5, RM-5, D-1 DM-1	(F) MF (all)	(G) NC, O, CL, C-2, C-3, E, D	(H) MXD, IDZ
Freeway - Freeway	S	*	*	*	*
Freeway – Principal Arterial	S	*	*	*	*
Freeway - Arterial	S	*	*	*	*
Freeway – Collector	S	*	*	*	*
Principal Arterial – Principal Arterial	S	*	*	*	*
Principal Arterial – Arterial	S	*	*	*	*
Principal Arterial – Collector	S	*	*	*	*
Arterial – Arterial	S	*	*	*	*
Arterial – Collector	S	*	*	*	*
Arterial – Local	--	*	*	*	*
Collector – Collector	--	*	*	*	*
Local – Collector	--	--	-- *	*	*
Local – Local	--	--	--	--	--

- (3) A Commercial Center shall not exceed 660 feet of frontage. No Commercial Center shall be approved in locations where the combined lineal frontage, including the Proposed Development, exceeds 3,600 feet.
- (4) The establishment of a Commercial Center shall not establish a precedent for higher-density zoning between the nodes or intersections where the Commercial Centers are established.

* * * * *

(o) Urban Design

6. Windows and Entryways

- A. The ground floors of all buildings shall be designed to encourage and to complement pedestrian-scale activity by the use of windows and doors arranged so that the uses are visible from and/or accessible to the street on not less than fifty percent (50%) of the length of the first floor street frontage. Not less than fifty percent (50%) ~~seventy percent (70%)~~ or more than ninety percent (90%) of the total surface area of the front elevation (facade) shall be in public entrances and windows (including retail display windows). Where windows are used, they shall be transparent. Solid walls shall not exceed twenty (20) feet in length. All street level retail uses with sidewalk frontage shall be furnished with an individual entrance and direct access to the sidewalk in addition to any other access that ~~which~~ may be provided. This standard shall not apply to any lot with a street frontage of less than twenty-four (24) feet.
- B. Doors shall be recessed into the face of the building to provide a sense of entry and to add variety to the streetscape. An entryway shall not be less than one (1) square foot for each 1,000 square feet of floor area, and in all cases shall not be less than fifteen (15) square feet.
- C. The maximum setback requirements may be waived by the Director for an area not to exceed ninety percent (90%) of the frontage in order to accommodate courtyards.

Chapter 35, Article III, Section 35-310.01(b), 35-310.01(d), and Table 310-1 are amended as follows:

35-310.01 *Generally*

* * * * *

- (a) No building permit shall be issued unless the proposed development conforms to the design regulations prescribed within the applicable zoning district. Rules for interpreting the design regulations are included in the Lot Layout, Height, and Density/Intensity Standards (Article 5, Division 4 of this Chapter (§§ 35-515 to 35-517)).
- (b) The design regulations for each district are included in Table 310-1 below. The design standards are illustrated graphically for each zoning district in a subsection entitled "Summary of Lot and Building Specifications" in each §§ 35-310.01 to 35-310.14, below. To the extent that there is any inconsistency between the provisions of Table 310-1 and the illustrations in the Summaries of Lot and Building Specifications, below, the provisions of Table 310-1 shall govern. Specific rules of interpretation and exceptions to the zoning district design regulations are as set forth in the Lot Layout, Height, and Density/Intensity Standards (Article 5, Division 4 of this Chapter).
- (c) Unless expressly permitted as an Accessory Use, a use permitted in the "RE," "R-20," "R-6," "R-5," "R-4," "RM-6," "RM-5," "RM-4," "MF-25," "MF-33," "MF-40," or "MF-50" districts must occur within a completely enclosed structure.

- (d) An Application approval of a subdivision plat within the incorporated areas of the City must comply with Table 310-2, below, where the proposed subdivision abuts an existing subdivision which was recorded and substantially developed as of the effective date of this Chapter (hereinafter the "Existing Subdivision"). The lots abutting the Existing Subdivision ("buffer lots") must comply with the following minimum lot sizes:

Table 310-2
Design Regulations

Zoning of Adjacent Subdivision	Buffer Lots
R-20	R-20
RE	R-20 or RE

Table 310-1

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Zoning District	Minimum Lot Size Conventional	Maximum Density	Minimum Street Frontage	Minimum Lot Width	Maximum Lot Width	Maximum Building Height	Minimum Front Setback	Maximum Front Setback	Minimum Side Setback	Minimum Rear Setback	Maximum Building Size (Individual Buildings)	Maximum Building Size (Aggregate)
RP	10 acres	0.1	—	—	—	35 / 2-½	15	— ⁽³⁾	5	—	—	—
RE	43,560	1	100	120	—	35 / 2-½	15	— ⁽³⁾	5	30	—	—
R-20	20,000	2	65	90	—	35 / 2-½	10	— ⁽³⁾	5	30	—	—
R-6 ⁽¹⁾	6,000	7	30	50	150	35 / 2-½	10	- 35 ⁽³⁾	5	20	—	—
R-5 ⁽¹⁾	5,000	9	30	45	150	35 / 2-½	10	- 35 ⁽³⁾	5	20	—	—
R-4 ⁽¹⁾	4,000	11	20	35	150	35 / 2-½	10	- 35 ⁽³⁾	5	20	—	—
RM-6 ⁽¹⁾	6,000	7	15	15	150	35 / 2-½	10	- 35 ⁽³⁾	0	20	—	—
RM-5 ⁽¹⁾	5,000	9	15	15	100	35 / 2-½	10	- 35 ⁽³⁾	0	10	—	—
RM-4 ⁽¹⁾	4,000	11	15	15	80	35 / 2-½	10	- 30 ⁽³⁾	0	10	—	—
MF-25 ⁽¹⁾	—	25	50	50	—	35	—	20 ⁽³⁾⁽⁴⁾	5	10	—	—
MF-33 ⁽¹⁾	—	33	50	50	—	45	—	20 ⁽³⁾⁽⁴⁾	5	10	—	—
MF-40 ⁽¹⁾	—	40	50	50	—	60	—	20 ⁽³⁾⁽⁴⁾	5	10	—	—
MF-50 ⁽¹⁾	—	50	50	50	—	—	—	20 ⁽³⁾⁽⁴⁾	5	10	—	—
O-1	—	—	50	50	—	25	—	35	20 ⁽²⁾	30 ⁽²⁾	10,000	90,000
O-2	—	—	50	—	—	—	25	80	20 ⁽²⁾	30 ⁽²⁾	—	—
NC	—	—	20	—	—	25	—	15	10 ⁽²⁾	30 ⁽²⁾	3,000	—
C-1	—	—	50	50	—	25	—	20	10 ⁽²⁾	30 ⁽²⁾	5,000	15,000
C-2	—	—	20	—	—	25	—	—	10 ⁽²⁾	30 ⁽²⁾	—	—
C-3	—	—	20	—	—	35	—	—	30 ⁽²⁾	30 ⁽²⁾	—	—
D	—	—	—	—	—	—	—	20	—	—	—	—
L	—	—	80	—	—	35	25	—	30 ⁽²⁾	30 ⁽²⁾	—	—
I-1	—	—	80	80	—	60	30	—	30 ⁽²⁾	30 ⁽²⁾	—	—
I-2	—	—	100	100	—	60	30	—	50 ⁽²⁾	50 ⁽²⁾	—	—

Rules for Interpretation of Table 310-1:

Generally: The requirements for the parameters set forth in Columns (B) through (M), above, relate to the zoning district specified in the row under Column (A), above. A dash (-) indicates that the requirement does not apply within the particular zoning district. The dimensions specified in Columns (D) through (K) are expressed in linear feet. The dimensions specified in Columns (B), (L) and (M) are expressed in square feet unless otherwise provided. Rules of interpretation and additional standards for setback and height requirements are set forth in the Lot Layout, Height and Density/Intensity Standards (§ 35-515 to 35-517 of this Code).

Column (B): Minimum lot size (Column (B)) applies only to Conventional Option, single-family detached developments (see § 35-201 of this Chapter). The minimum lot size figures are expressed in square feet, unless otherwise indicated. Additional rules of interpretation are set forth in subsection (d) of this Section for minimum lot area.

Column (C): The maximum density requirements (Column (C)) are expressed in dwelling units per gross acre. Additional rules of interpretation are set forth in §§ 35-515 of this Chapter.

Column (D): Frontage is defined as the distance where a property line is common with a street right-of-way line. For irregular shaped lots, see § 35-515(c)(4).

Column (E): Lot width is defined as the width of the lot at the front setback line. For irregular shaped lots, lot width shall be measured at the front building line rather than the front setback line.

Column (F): Maximum lot widths apply only to detached single family residential development.

Column (G): Height is defined as the distance from finished floor elevation to the highest peak of the structure. All dimensions are in feet provided, however, that for zoning districts "RP" through "RM-4," the first number refers to feet and the second number refers to stories. A "story" is that part of a building between the surface of a floor and the ceiling immediately above. Additional height may be provided with increases in the minimum rear front and side setbacks shall increase as provided in § 35-517(d). Notwithstanding the requirements of Table 310-1, the maximum height (prior to applying any increase provided in § 35-517(d)) for an "O-2," "MF-25" or "MF-33" zoning district adjoining a platted subdivision zoned "RE" or "R-20" as of the effective date of this Chapter shall be thirty-five (35) feet or 2-½ stories.

Columns (H) & (I): The front setback shall be measured from the front lot line. The Principal Building or Principal Structure shall not be located closer to the front lot line than the distance established in Column (H). The front facade of the Principal Building or Principal Structure shall not be located further from the front lot line than the distance established in Column (I). For Townhouses and Attached Single-Family Dwellings, the minimum front setback shall be twenty (20) feet unless all off-street parking is located in the rear of the Principal Building or Principal Structure and the lot abuts an alley or driveway with a minimum width of 24 feet. Additional setbacks are required for height increases as set forth in § 35-517(d).

Column (J): The side setback requirements in the RM-6, RM-5, and RM-4 districts may be reduced to 0 on one side lot line and 10 feet on the other side lot line where needed to accommodate Zero Lot-Line development (see section 35-373 of this Article). Additional setbacks are required for height increases as set forth in § 35-517(d).

Column (K): Rear setback requirements shall not apply to any use in the NC, O-1, O-2, C-1, C-2, or C-3 zoning districts which abuts an alley or another structure within any of these districts. Notwithstanding the requirements of Table 310-1, an "MF-25," "MF-33," "MF-40" or "MF-50" zoning district adjoining a platted subdivision zoned "RE" or "R-20" as of the effective date of this Chapter shall have a minimum rear setback of forty (40) feet, and parking areas shall be located at least five (5) feet from any fence along the rear property line.

Columns (L) & (M): Dimensions are in square footage. See §§ 35-310.17(a)(2) and 35-310.18(a)(2) for specific rules of interpretation. Additional square footage may be available if a Specific Use Permit is approved, in accordance with these provisions.

Column (M): The aggregate square footage refers only to non-residential square footage. Where residential uses are permitted, (1) the square footage of non-residential uses within the contiguous boundaries of the district may not exceed the aggregate square footage, and (2) the aggregate square footage may be exceeded where the square footage exceeding the maximum aggregate square footage is devoted to residential uses.

Note (1) - Column (A): See §§ 35-372, 35-373, 35-515, & 35-516 of this Code for standards applicable to uses other than detached single-family dwellings.

Note (2) - Columns (J) & (K): Applies only to the setback area measured from a lot line which abuts a residential use or residential zoning district. The side or rear setback shall be eliminated where the use does not abut a residential use or residential zoning district.

Note (3) - Public and parochial school facilities and religious institutions whose primary activity is worship shall be exempt from the mandatory maximum front setback provisions.

Note (4) - Single family lot development within a "MF" multi-family zoning district shall meet the lot requirements for a "RM-4" zoning district.

Note (5) - Subdivision Recreation Facilities provided for the primary use of the subdivision's residents and located on property with a single-family zoning category shall be exempt from the front yard setbacks of Table 310-1.

* * * * *

Chapter 35, Article III, Section 35-311, Table 311-1 is amended as follows:

TABLE 311-1 RESIDENTIAL USE MATRIX																			
PERMITTED USE	RCD	RE	R-20	NP-15	NP-10	NP-8	R-6	RM-6	R-5	RM-5	R-4	RM-4	MF-25	MF-33	MF-40	MF-50	ERZD	LBCS FUNCTION	LCBS STRUCTURE

Dwelling - 3 Family								P		P	P	P	P	P	P	P	P	1000	1203
Dwelling - 4 Family								P		P	P	P	P	P	P	P	P	1000	1204
Dwelling - Accessory (Carriage Houses, Granny Flats, Echo Homes) in RM-4, RM-5, and RM-6 <u>granny flats allowed only if primary structure is a single family structure and use.</u>	P	P	P	P	P	P	P	P	P	P	P	P					P	1000	1130

Dwelling - Hud-Code Manufactured Homes (Residential)	S	S	S				S	S	S	S	P	P					P	1000	1150

Chapter 35, Article III, Section 35-311, Table 311-2 is amended as follows:

TABLE 311-2 NON-RESIDENTIAL USE MATRIX														
PERMITTED USE	O-1	O-2	NC	C-1	C-2	C-3	D	L	I-1	I-2	ERZD	(LCBS Function)		

Alcohol - Bar And/Or Tavern			P	P	P	P	P	P			P		2540	
Alcohol - Nightclub							P	P	P				2540	

Housing - Multifamily Dwellings, Extended Stay Hotel Or Timeshares					S	P	P				P			

Industrial - Rock Crusher									S	P	S		2120	

Recreation - Tennis, Racquetball, Handball, Volleyball, or Basketball - Noncommercial (Outside Courts Permitted)		P		S	S	P	P	P			P			
Recreation - Tennis, Racquetball, Handball, Volleyball, or Basketball - Commercial (Outside Courts Not Permitted)		P			S	P	P	P			P			
Recreation - Tennis, Racquetball, Handball, Volleyball, or Basketball - Commercial (Outside Courts Permitted)		P		P	S	P	P	P			P		5370	
Recreation - Tennis, Racquetball, Handball, Volleyball, or Basketball - Noncommercial (Outside Courts Not Permitted)		P			S	P	P	P			P			

Service - Party House, Reception Hall, Or Meeting Facilities					S	P	P	P	S		P			

Transportation - Transit Bus Maintenance Facility								S	P			NA		
Transportation - Transit Bus Storage Facility								S	P			NA		

TABLE 311-2 NON-RESIDENTIAL USE MATRIX												
	PERMITTED USE	O-1	O-2	NC	C-1	C-2	C-3	D	L	I-1	I-2	ERZD (LBCS Function)

Chapter 35, Article III, Section 35-341 is amended as follows:

35-341 Mixed Use District (“MXD”)

* * * * *

(a) Locational Criteria

A MX District may be designated for areas:

- (1) with an existing mix of retail, office, service and residential uses located within a radius of one-quarter (¼) of a mile, or
- (2) on a tract or parcel for which a TND Use Pattern is proposed.

(b) Use Regulations

The Use Matrix is not applicable to a Mixed Use District provided, however, that no building permit shall be issued unless requested use conforms to a Master Development Plan approved as part of a rezoning to an MX District. If a MX District is not approved pursuant to a conditional rezoning, permitted uses shall be governed by the TND Regulations with the exception that a mixed use development may comprise a single building and/or lot. There shall be no maximum size to a "MX" District as long as it conforms with the maximum size limits, if any, imposed upon TNDs. A TND ~~is~~ may be permitted in a MX District as of right.

(c) Lot and Building Specifications

See TND Regulations (§ 35-207 of this Chapter).

(d) General Provisions

See TND Regulations (§ 35-207 of this Chapter).

* * * * *

Chapter 35, Article III, Section 35-354 is amended as follows:

35-354 Manufactured Housing (“MH”) District

(a) Purpose

The “MH” districts are composed of areas suitable for manufactured homes and compatible uses. The districts are intended to provide suitable locations for HUD-code manufactured homes on individual lots as well as for manufactured home parks. ~~The district regulations are designed to~~

~~provide adequate protection both for the manufactured homes and for the surrounding development.~~

(b) Permitted Uses

The permitted uses within an "MH" district shall be those uses permitted in "RM-4" in Table 311-1 of this chapter ~~an "R-6" district, and manufactured homes and manufactured home parks.~~

(c) Manufactured Homes on Individual Lots

- (1) HUD-code manufacture homes may be located on individual lots outside of a manufactured home park (6) inches, constructed with material generally provided they are permanently installed and limited to one home per lot. In addition they shall be subject to the following standards which are designed to ensure acceptable compatibility in exterior appearance between HUD-code manufactured homes and site built dwellings that have been or may be constructed in adjacent or nearby locations.
- (2) HUD-code manufactured homes shall be permanently affixed to a foundation with a visible foundation system and skirting acceptably similar in appearance to foundations of site built residences. The foundation shall form a complete enclosure under exterior walls. Wheels and axles shall be removed. All units must also have covered front and rear entries, and site built steps and porches.
- ~~(3) The minimum width of a HUD code manufactured home, excluding any attendant structures or additions assembled on site, shall be 20 feet.~~
- (4) Each HUD-code manufactured home shall have a sloping roof with eave projections of at least six (6) inches, constructed with material generally acceptable for site built housing. The pitch of the main roof shall not be less than one (1) foot of rise for each four (4) feet of horizontal run.
- (5) Any materials that are generally acceptable for site built housing may be used for exterior finish if applied in such a manner as to be similar in appearance, provided, however, that reflection from such exterior shall not be greater than from siding coated with clean, white, semigloss enamel paint.

(d) Dimensional Regulations

The dimensional regulations for an "MH" district are the same as those applicable to an "RM-4" ~~"R-4"~~ district (see § 35-310 of this Article).

Chapter 35, Article III, is amended by adding a new Section 35-355 as follows:

35-355 Manufactured Housing Conventional ("MHC") District

(a) Purpose

The "MHC" districts are intended to provide suitable locations for HUD-code manufactured homes in manufactured housing conventional subdivisions.

(b) Permitted Uses

The permitted uses within an “MHC” district shall be those uses permitted in an “RM-4” district, and manufactured homes and manufactured home parks.

(c) Manufactured Homes Design and Installation Criteria

- (1) HUD-code manufacture homes shall be permanently installed and limited to one home per lot. In addition they shall be subject to the following standards which are designed to ensure acceptable compatibility in exterior appearance between HUD-code manufactured homes and site built dwellings that have been or may be constructed in adjacent or nearby locations.
- (2) HUD-code manufactured homes shall be permanently affixed to a foundation with a visible foundation system and skirting acceptably similar in appearance to foundations of site built residences. The foundation shall form a complete enclosure under exterior walls. Wheels and axles shall be removed. All units must also have covered front and rear entries, and site built steps and porches.
- (3) Each HUD-code manufactured home shall have a sloping roof with eave projections of at least six (6) inches, constructed with material generally acceptable for site built housing. The pitch of the main roof shall not be less than one (1) foot of rise for each four (4) feet of horizontal run.
- (4) Any materials that are generally acceptable for site built housing may be used for exterior finish if applied in such a manner as to be similar in appearance, provided, however, that reflection from such exterior shall not be greater than from siding coated with clean, white, semi gloss enamel paint.

(d) Dimensional Regulations

The dimensional regulations for an “MH” district are the same as those applicable to an “RM-4” district (see § 35-310 of this Article).

Chapter 35, Article III, is amended by adding a new Section 35-356 as follows:

35-356 Manufactured Housing Park (“MHP”) District**(a) Purpose**

The Manufactured Housing Park “MHP” district is composed of areas suitable for manufactured homes and compatible uses. The districts are intended to provide suitable locations for HUD-code manufactured homes for manufactured home parks. The district regulations are designed to provide adequate protection both for the manufactured homes and for the surrounding development.

(b) Permitted Uses

The permitted uses within an “MHP” district shall be those uses permitted in an “RM-4” district, and manufactured homes and manufactured home parks.

(c) Manufactured Homes on Individual Lots

- (1) HUD-code manufacture homes may be located on individual lots in a manufactured home park. All manufacture homes in a "MHP" district shall be permanently installed and limited to one home per lot. In addition they shall be subject to the following standards which are designed to ensure acceptable compatibility in exterior appearance between HUD-code manufactured homes and site built dwellings that have been or may be constructed in adjacent or nearby locations.
- (2) HUD-code manufactured homes shall be permanently affixed to a foundation with a visible foundation system and skirting acceptably similar in appearance to foundations of site built residences. The foundation shall form a complete enclosure under exterior walls. Wheels and axles shall be removed. All units must also have covered front and rear entries, and site built steps and porches.
- (3) Each HUD-code manufactured home shall have a sloping roof with eave projections of at least six (6) inches, constructed with material generally acceptable for site built housing. The pitch of the main roof shall not be less than one (1) foot of rise for each four (4) feet of horizontal run.
- (4) Any materials that are generally acceptable for site built housing may be used for exterior finish if applied in such a manner as to be similar in appearance, provided, however, that reflection from such exterior shall not be greater than from siding coated with clean, white, semi gloss enamel paint.

(d) Dimensional Regulations

The dimensional regulations for an "MHP" district are the same as those applicable to an "RM-4" district (see § 35-310 of this Article).

(e) Manufactured Homes Developed within a Manufactured House and Recreational Vehicle Park

- (1) Manufactured homes within a "MHP" district not developed on individual lots per the above shall be developed in compliance with the provisions of 35-381 Manufactured Homes and Recreational Vehicle Parks.

35-357 to 35-359 Reserved.

Chapter 35, Article III, Section 35-371 is amended as follows:

35-371 Accessory Dwellings

* * * *

(a) Generally

- (1) The property owner, which shall include title holders and contract purchasers, must occupy either the principal unit or the Accessory Dwelling as their permanent residence,

and shall at no time receive rent for the owner-occupied unit. 'Owner occupancy' means a property owner, as reflected in title records, makes his or her legal residence at the site, as evidenced by voter registration, vehicle registration, or similar means. The property owner shall sign an affidavit before a notary public affirming that the owner occupies either the main building or the Accessory Dwelling. The applicant shall provide a covenant suitable for recording with the County Recorder, providing notice to future owners or long term ~~leasees~~ ~~lessors~~ of the subject lot that the existence of the accessory dwelling unit is predicated upon the occupancy of either the accessory dwelling or the principal dwelling by the owner of the property ~~person to whom the certificate of occupancy has been issued~~. The covenant shall also require any owner of the property to notify a prospective buyer of the limitations of this Section and to provide for the removal of improvements added to convert the premises to an accessory dwelling and the restoration of the site to a single family dwelling in the event that any condition of approval is violated.

- (2) No Accessory Dwelling shall be constructed, used or occupied unless and until an Accessory Dwelling Permit is issued.
- (3) The Accessory Dwelling shall be connected to the central water and sewer system of the Principal Structure.
- (4) The total number of occupants in the accessory dwelling unit combined shall not exceed three persons.
- (5) The Accessory Dwelling shall not exceed eight-hundred (800) square feet of gross floor area in the R-4, RM-4, R-5, RM-5, R-6, RM-6 and R-20 zoning districts, or 1,200 square feet in the RE zoning district. This restriction applies only to that portion of a structure that ~~which~~ constitutes living area for an Accessory Dwelling.

(b) Accessory Detached Dwelling Units

Where permitted pursuant to § 35-311 of this Chapter, an Accessory Detached Dwelling Unit ("ADDU") shall not be established except in accordance with the following criteria:

- (1) The building footprint for the ADDU shall not exceed 40 percent (40%) of the building footprint of the principal residence. The "building footprint" shall include porches ~~patios~~, but shall not include patios ~~porches~~.
- (2) Total floor area of the ADDU shall not exceed 800 square feet or be less than 300 square feet.
- (3) An ADDU shall not contain more than one (1) bedroom.
- (4) Only one (1) accessory unit shall be permitted per lot.
- (5) Parking areas shall be located behind the front yard.

- (6) In order to maintain the architectural design, style, appearance and character of the main building as a single-family residence, the ADDU ~~the ADDU~~ shall have a roof pitch, siding and window proportions identical to that of the principal residence.

(c) *Attached Accessory Dwelling Units*

- (1) The gross floor area of the Accessory Apartment shall not exceed thirty-five percent (35%) of the total living area of the Principal Dwelling Unit.
- (2) Occupancy of the accessory apartment shall not exceed one person per two hundred (200) square feet of gross floor area.

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Chapter 35, Article III, is amended by adding a new Section 35-396 as follows:

35-396 *Illumination of Uses*

(1) Lighting facilities used to light signs, parking areas, or for other purposes shall be so arranged that the source of light is concealed from adjacent residential properties and does not interfere with traffic.

(2) Lights illuminating off-street parking or loading areas shall comply with the following standards as a protection against excessive glare and light spilling over to adjacent properties.

A. When a light source has elements such as shields, reflectors, or refractor panels which direct and cut off the light at a cutoff angle that is less than ninety (90) degrees, the maximum permitted height shall be thirty (30) feet.

B. If a light source has a cutoff angle of ninety (90) degrees or greater, the maximum permitted height shall be fifteen feet.

35-397 to 35-399 Reserved.

Chapter 35, Article IV, Section 35-403 is amended as follows:

35-403 Notice Provisions**(a) Generally**

The notice requirements for each type of application for development approval are prescribed in the individual subsections of this Article applicable thereto and/or the Texas statutes. The notice requirements for certain types of public hearings are established in Table 403-1 below provided, however, that to the extent of any inconsistency between the provisions of this section and any state statute, the state statute shall govern.

(b) Contents of Notice

The notice shall state the time, date and place of hearing and a description of the property subject to the application which includes, at a minimum, the following:

- The street ~~address or addressor~~, if the street address is unavailable, the legal description by metes and bounds, or a general description of the location of the property, either using block numbers, nearby street intersections or approximate distance from street intersections;
- The current zoning classification, if any; and
- The category of permit requested and a brief description of the proposed development including Density or Building Intensity, revised zoning classification (if any), and uses requested.

In Table 403-1, the method for providing notice is provided in Column (A) and the types of permits affected are set forth in Columns (B) through (F). In Table 403-1, an asterisk (*) indicates that the type of notice prescribed in Column (A) is required for the category of Development Order prescribed in Columns (B) through (F), while a dash (-) indicates that the notice is not required.

Table 403-1
Notice Requirements

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(J)	(K)
<i>Type of notice</i>	<i>Amendments to Master Plan or this Chapter</i>	<i>Rezoning</i>	<i>Master Development Plan</i>	<i>Appeals to Board of Adjustment</i>	<i>Variances from Board of Adjustment</i>	<i>Subdivision Plat, Major</i>	<i>Subdivision Plat, Minor</i>	<i>Certificate of Appropriateness</i>	<i>Permits, Orders or Approvals not Mentioned Requiring Public Hearing</i>
Publication: Publication in an official newspaper of general circulation before the 15th day before the date of the hearing.	*	*	--	*	*	* ⁽⁵⁾	--	--	*
Mail: Before the 10 th day before the hearing date, written notice of the public hearing shall be sent	--	*(3)(4)	*(3)	*(3)(4)	*(3)(4)	*(3)(4)(5)	--	--	*(4)(5)
Internet: post a copy of the notice on the City's Internet website until the proceeding has been completed.	*	*(1)	*	*	*	*	*	*	*
Signage: post a sign on the property subject to the Application Signs to be installed and provided by the City ⁽²⁾	--	*(1)	--	--	--	--	--	*	--

Notes:

- (1) Effective if passed by a 2/3 majority of the City Council pursuant to VTCA Local Government Code § 211.007(d) and if the City Council and Zoning Commission conduct a joint hearing.
- (2) The sign shall measure not less than four feet by four feet with a caption stating "Site of Proposed Rezoning, " ", " as applicable. The letters shall be not less than eight inches in height and two inches in width. The sign must state required by subsection (b), above. Such signs shall be deemed to comply with Section 28 of the City Code, notwithstanding any provision to the contrary.
- (3) Notice shall be sent to Registered Neighborhood Associations within 200 feet of the project.
- (4) Notice shall be sent to each owner, as indicated by the most recently approved municipal tax roll, of real property within 200 feet of the property
- (5) Notice shall be sent prior to the 15th day before the date of the public hearing. Notice shall be sent only if a replat requires a public hearing with required notice.

(c) Action to be consistent with notice

The reviewing body may take any action on the application that is consistent with the notice given, including approval of the application, conditional approval (if applicable) of the application, or denial of the application.

(d) Minor amendments not requiring renotification

The provisions of this subsection (d) shall govern to the extent not inconsistent with provisions relating to minor amendments for a specific category of Development Permits of Development Orders. The reviewing body may allow minor amendments to the application without requiring resubmission ~~resubmittal~~ of the entire application. For purposes of this subsection, "minor amendments" are amendments which:

1. permit equal or fewer dwelling units, floor area or impervious surface than that requested on the original application;
2. reduce the impact of the development; or
3. reduce the amount of land involved from that indicated in the notices of the hearing.

The reviewing agency shall not, in any case, permit as a minor amendment:

1. an increase in the number of dwelling units, floor area, or impervious surface development,
2. a different land use than that requested in the application,
3. a larger land area than indicated in the original application, or
4. a greater variance than that requested in the application.

In addition, the reviewing agency shall not reduce or eliminate conditions for a Specific Use Authorization or conditional zoning district unless a new notice is provided prior to the final decision thereto.

Chapter 35, Article IV, Section 35-430 is amended as follows:

35-430 *Applicability & General Rules*

(a) *Subdivisions subject to this Section*

- (1) The owner of a tract of land located within the limits or in the extraterritorial jurisdiction of the City who divides the tract in two or more parts to lay out a subdivision of the tract, including an addition to a municipality, to lay out suburban, building, or other lots, or to lay out streets, alleys, squares, parks, or other parts of the tract intended to be dedicated to public use or for the use of purchasers or owners of lots fronting on or adjacent to the streets, alleys, squares, parks, or other parts must have a plat of the subdivision prepared. A division of a tract under this subsection includes a division regardless of whether it is made by using a metes and bounds description in a deed of conveyance or in a contract for a deed, by using a contract of sale or other executory contract to convey, or by using any other method. The division of a tract of land for any of the purposes specified herein does not require a transfer of title of all or part of the tract.
- (2) The mechanism which is available to municipalities to become aware that a division of land has occurred or will occur is through a request for utility service and/or a building permit. V.T.C.A., Local Government Code, Section 215.012 recognizes this fact by prohibiting cities, officials of cities, city-owned or city-operated utilities, and public utilities from serving or connecting any land with water, sewer, electricity, gas, or other utility service unless the entity has been presented with or otherwise holds a certificate applicable to the land which has been issued by the planning commission indicating that a plan or plat is not required or that a plan or plat is required and has been approved by the commission.
- (3) The above notwithstanding, this should not be construed as a limitation to the city's ability to require platting under Section 212.004 of V.T.C.A., Local Government Code, when the city has substantial evidence that land is being subdivided in the manner set out in Section 212.004 of V.T.C.A., Local Government Code. In such an instance, however, the specific exceptions set out in subsection (b) herein shall remain applicable.

(b) *Classification of Subdivisions*

Both major and minor subdivisions are subject to the criteria for approval of subdivision plats, unless a specific provisions indicates that it does not apply to minor subdivisions. Different time limits are prescribed for the review and processing of major and minor subdivisions in order to reflect the level of complexity involved in review of the applications. Subdivisions shall be classified as follows:

(1) Minor subdivisions [reference: V.T.C.A., Local Government Code, § 212.0065(a)(2) ~~211.0065(a)(2)~~]

A “Minor Subdivision “ means any subdivision:

Involving four (4) or fewer lots; and
Fronting on an existing street; and
Not involving the creation of any new street; and
Not involving the extension of municipal utilities.

A requirement imposing sidewalk improvement and installation shall not constitute a major plat.

(2) Major subdivisions

A “Major Subdivision” means any subdivision other than a minor subdivision or a development plat.

(c) Plat Exceptions

In accordance with V.T.C.A., Local Government Code, §§ 212.004 and 212.0045, the platting exceptions set forth below are established. Applicants exempt from subdivision plat approval may be subject to Development Plat approval requirements pursuant to § 35-435 of this Article. The Department of Building Inspections may issue building permits, and public utility providers may provide utility service, on any unplatted parcel otherwise subject to this section for the following activities:

- (1) The division of land into parts greater than five acres, where each part has access and no public improvement is being dedicated, shall not require a subdivision plat. For purposes of this subsection, access shall mean a minimum frontage of fifteen (15) feet onto a public street or recorded access easement of fifteen (15) feet onto a public street ~~twenty (20) feet on an existing public or platted private street.~~
- (2) Uninhabitable uses that are to be retained in an undeveloped state shall not require a subdivision plat, provided: (1) the division does not create more than three (3) parcels, (2) each parcel contains a minimum area of five thousand (5,000) square feet, (3) the division does not involve the creation of any streets or alleys, and (4) no utility services shall be provided to the parcels, provided however, that the Director of Planning may exempt other uninhabitable uses from subdivision plat requirements upon determining that the uses are consistent with the intent of these provisions.

Commentary: The intent of this subsection is to allow the division of land without platting so long as the land remains undeveloped. Platting is required at the time utility services or building permits are requested unless one of the other plat exceptions applies.

- (3) Other uninhabitable uses including, but not limited to, pumps, oil wells, sheds, security lights, traffic devices, billboards, utility equipment huts, communication towers, ~~or~~ public infrastructure, or temporary field office shall not require a subdivision plat.
- (4) Public parks owned, operated, or maintained by a governmental entity shall not require a subdivision plat.
- (5) Temporary subdivision sales offices or seasonal type uses shall not require a subdivision plat.
- (6) Existing single-family dwelling units with electrical service in place or suspended shall not require a subdivision plat.
- (7) Replacement of a pre-existing or existing single family dwelling unit or related accessory structure shall not require a subdivision plat.
- (8) The division of any tract of land into parcels which are to be used solely for agricultural, mining, or quarrying purposes shall not require a subdivision plat, provided: (1) each parcel contains a minimum area of twenty (20) acres, and (2) no utility services shall be provided to an inhabitable use.
- (9) The provision of utility service to not more than three (3) dwelling units on an unplatted tract shall not require a subdivision plat provided all of the following requirements are met: (1) the tract is located outside the city limits within the extraterritorial jurisdiction of the city; (2) the tract has a minimum of fifteen (15) ~~twenty (20)~~ feet of frontage on a public street or a recorded access easement and the tract was created prior to July 1, 1990; (3) the tract has a minimum area of five thousand (5,000) square feet for each dwelling unit; (4) the tract is held under single ownership; (5) no major thoroughfare dedication is required; (6) no dwelling unit will be located within a regulatory floodplain; and (7) no utility extension is required. Pursuant to subsection (c)(9)(5), the owner of an unplatted parcel abutting a designated major thoroughfare may voluntarily execute a street dedication instrument in accordance with Form S in Appendix C in lieu of public dedication through platting when necessary. Any further subdivision shall require approval of a subdivision plat as provided herein.

(d) *Certificate of Determination [Reference: VTCA Local Gov't Code § 212.0115]*

On the written request of an owner of land, an entity that provides utility service, or the City Council, the Planning Director shall make the following determinations regarding the owner's land or the land in which the entity or City Council is interested that is located within the jurisdiction of the City:

- whether a plat is required under this Division for the land; and
- if a plat is required, whether it has been prepared and whether it has been reviewed and approved by the Planning Director.

The request made under this Subsection must identify the land that is the subject of the request. If the Planning Director determines under this Subsection that a plat is not required, the Planning Director shall issue to the requesting party a written certification of that determination. If the Planning Director determines that a plat is required and that the plat has been prepared and has been reviewed and approved by the Planning Director, the Planning Director shall issue to the requesting party a written certification of that determination. The Planning Director shall make its determination within 20 days after the date it receives the request under this Subsection and shall issue the certificate, if appropriate, within 10 days after the date the determination is made. For purposes of this subsection, the term Planning Director shall mean the Director of Building Inspections in the case of an application for a building permit, or the utility provider in the case of an application for utility service. The City Council hereby delegates the ability to perform the responsibilities under this subsection to the Authority. A binding decision of the Authority under this subsection is appealable to the Planning Commission.

(e) Conflict with County Regulations

This Division shall not be applied in such a manner to amend or alter any rules, regulations, procedures or policies lawfully and officially adopted by the governing body of any county in which there exists territory contained within the area of extraterritorial jurisdiction of the city. In the circumstance where any rule, regulation, procedure or policy lawfully and officially adopted by the governing body of any county is less restrictive than those contained herein, then the standards of this chapter shall apply.

(f) Performance Agreements

(1) Performance Agreement Required

No plat shall be approved unless a performance agreement is provided and filed with the office of the city clerk ~~that~~ which meets the requirements of § 35-436 of this Chapter, unless no improvements are required.

(2) Site Improvement Time Extension Granted by Planning Director

An applicant may request a performance agreement time extension provided that site improvement construction has started and is submitted with a written request and justification to the director of planning at least thirty (30) days prior to the time limit set out in the performance agreement. Each request shall be accompanied by a filing fee as specified in Exhibit C. A guarantee, in an amount sufficient to cover the cost of remaining site improvements, shall be required if necessary in order for an extension to be granted. Such guarantee must be filed within thirty (30) days of the granting of the extension or the extension shall become null and void. Should the granting of such extension require the filing of any instruments, such as those set out in Exhibit B, the fees for recording such instruments shall be paid by the subdivider to the director of planning. The director of planning is authorized to approve time extensions which meet the following criteria after consultation with all affected departments and utilities:

- **Sidewalk improvements.** A three (3) year time extension from the expiration of the performance agreement may be granted provided a plan indicating the uncompleted sidewalks and a time schedule for completion is submitted.

- **Other site improvements.** A one (1) year time extension from the expiration of the performance agreement may be granted provided at least seventy-five (75) percent of the required site improvements are completed.

Time extension requests which do not meet the above criteria or ~~that which~~ are not approved by the director of planning shall be considered by the planning commission whose decision shall be final.

(3) Time Extension Granted by Planning Commission

The Planning Commission may grant a time extension as provided in subsection (2), above, if the subdivision plat does not have an expiration date and no progress has been made towards completion of the project, as defined in V.T.C.A. Local Government Code § 245.005. If no time extension is granted, the subdivision plat shall expire on May 11, 2004.

Chapter 35, Article IV, Section 35-431 is amended as follows:

35-431 Letters of Certification

The purpose of this Section is to assist the Applicant in obtaining necessary certifications needed for plat approval and to coordinate applications for subdivision approval with the standards and procedures required by this Chapter.

(a) Applicability

Prior to filing an application for plat approval, the applicant shall secure letters of certification as required by this Section.

(b) Initiation

(1) Certifying Departments

A request for Letters of Certification and required items shall be filed by the applicant with the following Departments (hereinafter "Certifying Departments"):

- A. Department of Public Works
- B. Department of Planning
- C. SAWS
- D. CPS
- E. Department of Parks and Recreation

(2) Referral

In addition to the Certifying Departments, copies of the requests for plat review along with required information shall be distributed to the city tax office, Southwestern Bell Telephone, Cable Television, Aviation Department, Building Inspections Department, Historic Preservation Officer, San Antonio River Authority, San Antonio Development Agency, Bexar Metropolitan Water District, and Bexar County Public Works Department. A letter of certification is not required from these departments.

(3) Copies to Planning Director

A copy of each request for a Letter of Certification shall be filed with the Planning Director. The request for a Letter of Certification shall be in the form prescribed in Appendix B. In order to track the application, the Planning Director may assign a tentative tracking number for the Letter of Certification in the event that an Application for subdivision plat approval is filed.

(4) Plat number

Prior to submitting a plat, replat, or amending plat for review by the city or any other agency, the applicant shall complete a plat application with the department of planning and obtain a plat number.

(5) Fees

At the time an application for Letters of Certification is submitted, the applicant shall pay to the City of San Antonio the platting fees specified in Exhibit C. The platting fees are not transferable to other properties nor are they refundable. However, refunds shall be granted if the fees collected are in excess of the amount required at the time of plat filing, and such excess is not due to a substantial design change from that which was indicated on the initial application, or if an error in the plat fee calculation is discovered. If a plat is not formally filed with the planning commission within two (2) years from the date of the plat application, the application expires and new platting fees shall be required. The following situations shall be exempt from platting fees:

- City of San Antonio projects which involve platting, and which are payable from the general fund.
- Permeable areas identified on a proposed plat such as private or public drains, conservation, landscape, or greenbelt easements.

(c) Completeness Review

Upon receipt of a request for letters of certification, the Planning Director shall classify the request as a tentative major subdivision or a tentative minor subdivision. The Appellate Agency for purposes of completeness review (see § 35-402(c) of this Chapter) shall be the Planning Commission. When a Certifying Department determines that the proposed plat or any of the required accompanying data does not conform with the requirements of this chapter, the Certifying Department shall so notify the applicant and director of planning. If the Certifying Department issues a letter of certification recommending disapproval of the proposed plat, the letter shall indicate the section and specific requirement of the regulations and the manner in which the request does not comply. The applicant may then revise the nonconforming aspects or ~~aspects or~~ may file the proposed request with the Planning Commission pursuant to § 35-432 of this Chapter, with or without a request for a variance (§ 35-483 of this Article) provided, however, that if no variance request is submitted and approved and the application does not conform to this Chapter, the Application shall be denied.

(1) Tentative Minor Subdivisions

Respective reviewing departments and agencies shall report to the Director of Planning ~~Planning~~ whether the request for letters of certification is complete within five (5) days after submittal of the request.

(2) Tentative Major Subdivisions

Respective reviewing departments and agencies shall report to the Director of Planning ~~Planning~~ whether the request for letters of certification is complete within ten (10) days after submittal of the request.

(d) Decision

The following procedures shall apply to the issuance of a Letter of Certification:

(1) LOC Technical Minor Subdivisions Plat Review

After respective certifying departments and agencies have determined whether the request for letters of certification and required technical data is complete each Certifying Department shall issue a letter of certification within ten (10) working days. The applicant may at his/her option revise any nonconforming aspects. However, if any data are revised and resubmitted, the Certifying Department shall have an additional ten (10) days from the latest date of submission to issue or deny a revised letter of certification.

(2) LOC Technical Major Subdivisions Plat Review

After respective certifying departments and agencies have determined whether the request for letters of certification and required technical data is complete each Certifying Department shall issue a letter of certification within fifty (50) days. When a Certifying Department or agency determines that the proposed plat or any of the required accompanying data does not conform with the requirements of this chapter, the applicant may at his/her option revise any nonconforming aspects. If any data are revised and resubmitted, the certifying department/agency shall have up to fifty (50) days from the latest date of submission minus the number of days used for the initial review to issue or deny a letter of certification. In no case shall the certifying department have fewer than 10 days to review a resubmittal.

(3) Failure to Submit Letter of Certification

If a letter of certification is not issued or denied within the time periods prescribed in subsections (1) or (2), above, the same shall be deemed issued and the applicant may submit an application for subdivision plat approval pursuant to § 35-432, below, without submitting the letter of certification.

(e) Approval Criteria

Approval criteria do not apply to this section because a letter of certification does not authorize any subdivision or development activity, and any action by the Certifying Department shall constitute only a recommendation as to whether the activities subject to the request for letters of certification would comply with the requirements of this Chapter. The letters of certification request is a process for compiling a complete application for subdivision review.

(f) Subsequent Applications

Not applicable.

(g) Amendments

A letter of certification may be amended prior to filing an Application for Subdivision approval if the proposed amendment:

- Does not increase the number of lots subject to the Application.
- Does not increase by more than five percent (5%) the lineal footage of roadways or the areas within the paved surface of the Street right-of-way.
- Does not reduce the amount of open space within the proposed subdivision.

(h) Scope Of Approval

A letter of certification does not authorize the development or subdivision of land. Upon receipt of all letters of certification, the applicant may submit an application for subdivision plat approval.

Letters of certification shall remain valid for nine (9) months from the date of issuance by the certifying department/agency. After that time period, new or updated letters of certification shall be required to file a proposed plat with the planning commission.

The Director's decision to classify a subdivision as major or minor is based upon information provided by the Applicant. If the conditions relating to the classification of a subdivision as major or minor change (such as an increase in the number of lots or a subsequent application for a subdivision variance), the letters of certification shall become null and void and the Applicant shall refile the request for letters of certification.

(i) Recording Procedures

A Letter of Certification is not recorded. A Letter of Certification shall be maintained by the Applicant and presented with the proposed Application for Subdivision Plat approval.

Chapter 35, Article IV, Section 35-433 is amended as follows:

35-433 Development Plat

(a) Applicability

A. Pursuant to V.T.C.A. Local Government Code § 212.041, the City hereby chooses by ordinance to be covered by Subchapter B of V.T.C.A. Local Government Code, Chapter 212. A boundary survey is required for any person who:

- A. proposes the development of a tract of land located within the limits or in the extraterritorial jurisdiction of San Antonio, and
- B. is not required to file a subdivision plat as required in §§ 35-431 and 35-432.

(2) A development plat is not required where:

- A. The person is required or elects to file a subdivision plat; or
- B. One of the exceptions established in § 35-430(c)(2) – (c)(9) applies; or
- C. The tract is greater than five (5) acres, has access with a minimum frontage of fifteen feet onto to a public right of way, by a public street, platted private street, or a recorded irrevocable ingress/egress access easement, and which requires no public dedications. Providing further that the owner agrees not to further subdivide without filing a subdivision plat and a request for utilities shall not serve more than 3 dwelling units the requested improvements are for a residential use.

Pursuant to subsection (a)(2)(C) above, the owner of an unplatted parcel abutting a designated major thoroughfare may voluntarily execute a street dedication instrument in accordance with Form S in Appendix B, Section 35-B121 in lieu of public dedication through platting when necessary.

(b) Initiation

See § 35-432(b) of this Chapter

(c) Completeness Review

The Planning Director shall review the Development Plat for completeness as set forth in § 35-432(c) of this Chapter. The Appellate Agency for purposes of completeness review (see § 35-402(c) of this Chapter) shall be the Planning Commission.

(d) Decision

The Development Plat shall be processed in the same manner as a Minor Plat, § 35-432(d) of this Article.

(e) Approval Criteria.

See § 35-432(e) of this Chapter.

(f) Subsequent Applications.

See § 35-432(f) of this Chapter.

(g) Amendments

See § 35-432(g) of this Chapter.

(h) Scope Of Approval.

(1) Approval does not Constitute Dedication

The approval of a development plat is not considered an acceptance of any proposed dedication for public use or use by persons other than the owner of the property covered by the plat and does not impose on the city any duty regarding the maintenance or improvement of any purportedly dedicated parts until the city's governing body makes an actual appropriation of the dedicated parts by formal acceptance, entry, use, or improvement.

(2) Impact Fees

New development may not begin on the property until all impact fees have been paid as required by § 35-507 of this chapter and/or the San Antonio Water System's Regulations for Water Service and the development plat is approved by the city.

(3) Building Permits / Septic Tank Approval

The city, a county, or an official of another governmental entity may not issue a building permit or any other type of permit for development on lots or tracts subject to this section until a development plat is filed with and approved by the city. Applicants for development plat approval may also require approval by Bexar County for septic facilities or, in the extraterritorial jurisdiction of the City, a subdivision plat. Bexar County does not recognize development plats approved by the City. Accordingly, applicants may choose to file a subdivision plat pursuant to the major subdivision or minor subdivision procedures of this ordinance in lieu of filing a development plat.

(i) Recording Procedures

See § 35-432(i), above.

Chapter 35, Article V, Section 35-501 is amended as follows:

35-501 General Provisions

(a) Applicability

The provisions of this Chapter shall apply to any Application for Development Approval, except as otherwise provided.

(b) Administrative Exceptions

- (1) To facilitate flexibility in design while maintaining the safety, health and welfare of the public, the Public Works Director may grant administrative exceptions to the following technical design requirements found in the following sections of Article V:

- Section 35-502 Traffic Impact Analysis
- Section 35-504 Stormwater Management
- Section 35-505 Floodplain Development Standards
- Section 35-506 Transportation and Street Design
- Section 35-507 Utilities

- Section 35-526 Parking & Loading Standards (parking stall dimensions and parking requirements not to exceed +/- 10 % of the required parking).
 - Section 35-527 Off-Street Truck Loading Requirements
- (2) No administrative exception shall be granted unless:
- A. The Director of Planning certifies that the proposed exception does not conflict with the goals and policies of the Master Plan; and
 - B. The Applicant demonstrates, through documentation and/or studies, based on generally accepted engineering principles, that adherence to the standard provided by this Chapter would not pose a threat to health and safety.
- (3) Where an administrative exception is not granted, or where an administrative exception is not permitted (as in the case of street connectivity, maximum parking requirements, and other items not enumerated in subsection (2), above), the applicant may seek a variance from the Planning Commission pursuant to §§ 35-483 or 35-484 in the case of subdivision plats, or an appeal or variance pursuant to §§ 35-481 or 35-482 in the case of zoning permits.

(c) *Site improvements.*

Streets, alleys, sidewalks and other site improvements required under the provisions of this chapter to be installed in subdivisions by the subdivider shall conform to the specification of this chapter and to the then current policies and regulations of the directors of public works, City Public Service, San Antonio Water System, or other approved utility districts or agencies involved with reference to payment for such installations, refunds, credits and other financial arrangements.

(d) *Standard Specifications for Construction.*

All construction shall meet the requirements as set forth in the city's "Standard Specifications for Public Works Construction," dated October 1995, as amended (hereinafter the "Standard Specifications"), to the extent not inconsistent with this Chapter. The "Standard Specifications for Public Works Construction" are hereby incorporated by reference as if set forth in their entirety herein. Copies of the document are on file in the office of the city clerk. To the extent that there is any inconsistency between the Standard Specifications and the provisions of this Chapter, the provisions of this Chapter shall govern.

Sampling and testing of materials and laboratory inspection of materials and processes shall be performed at the expense of the developer. Testing shall be in accordance with the City of San Antonio's Standard Specifications for Public Works Construction. Firms providing construction materials testing services must have an established in-house laboratory meeting the standards of the ASTM requirements.

(e) *Americans with Disabilities Act*

(1) *Infrastructure*

Infrastructure construction and improvements of facilities shall comply with the Americans with Disabilities Act of 1990 (42 U.S.C Subsection 12181 et seq., Pub. L 101-336 and implementing regulations at 28 C.F.R. parts 35 and 36). Applicants should consult the ADA Technical Assistance Manual from the U.S. Dept. of Justice on the Internet at <http://www.usdoj.gov/crt/ada/taman3.html>, and Technical Assistance Manual for State and Local Governments at <http://www.usdoj.gov/crt/ada/taman2.html>.

(2) Multifamily Housing

Multifamily housing development shall comply with section 804 (f)(5)(C) Fair Housing Amendments Act of 1988 and the implementing regulations codified at 24 CFR 100.205. Applicants should consult the Fair Housing Accessibility Guidelines from the U.S. Dept. of Housing and Urban Development on the internet at <http://www.hud.gov/fhefhag.html>. See also HUD Fair Housing Assistance Providers Web site: <http://www.hud.gov/fairhsg1.html>.

(f) Extended Warranty Bond

All subdivisions requiring streets and drainage improvements within the City of San Antonio and the Extraterritorial Jurisdiction shall be subject to a one (1) year maintenance bond.

Prior to acceptance of subdivision improvements, the developer shall provide the City with an extended warranty bond, issued by a corporate surety company licensed to transact business in the State of Texas, to secure maintenance and repair of subdivision for the period ending at least twelve (12) months subsequent to acceptance of the subdivision improvements by the City.

(g) Incorporation by Reference

The San Antonio Water System Utility Service Regulations, as amended, are incorporated by reference into Chapter 35 (Unified Development Code) of the Code of the City of San Antonio, Texas. The most current edition of the San Antonio Water System Utility Service Regulations is on file in the Office of the City Clerk and the Office of the President/Chief Executive Officer of the San Antonio Water System.

Chapter 35, Article V, Section 35-503 is amended as follows:

Parks/Open Space Standards

* * * * *

(a) Applicability

- (1) The provisions of this section shall apply to any application for residential subdivision plat approval, unless exempt pursuant to subsection (3), below.
- (2) The location and extent of ~~Parks and/or Open Space~~ Parks/Open Space or designation of a fee-in-lieu of option shall be indicated on any Master Development Plan, with dedication deferred until a subdivision plat is filed consistent with subsection (g) of this section. Where indicated, the required area shall conform to the requirements of

subsection (b) as they relate to the total number of dwelling units approved at the time the Master Development Plan is filed.

Commentary: The Master Plan requires new subdivisions to include parks or to pay fees in lieu of providing parks. Developers may opt to show parks on a Master Development Plan in order to facilitate the phasing of subdivision plats filed pursuant to the Master Plan. This allows some plats to be approved without individually complying with this Section, so long as the requirements of this Section are met for the entire development subject to the Master Development Plan. The applicant and the City may also execute a deferment contract which provides for the provision of parks/open space during a future phase of the development.

- (3) The provisions of this Section do not apply to:
- A. A proposed subdivision which includes less than twenty-five (25) dwellings lots; or
 - B. A proposed subdivision located within an Infill Development Zone; or
 - C. A proposed subdivision located within a planning area which has a surplus of improved neighborhood parks/open space, as designated in the Parks Master Plan unless the surplus has been eliminated by the subsequent approval of residential dwelling units within the planning area, as measured by the level of service standard established in Table 503-1, Column (B).

(b) Required Parks/Open Space

- (1) Required parks/open space shall be reserved for any development in the zoning districts or areas set forth in column "A" of Table 503-1, below, based upon the number of Dwelling Units in the proposed development corresponding the zoning district as set forth in Column "B" in Table 503-1 below hereto.

**Table 503-1
Required Parks**

(A) Zoning District(s) Or Areas	(B) Required Parks or Open Space (acres per Dwelling)*
ETJ	1 per 114
CS, RE	N/A
R-20, R-15, R-10, R-8, R-6, RM-6, R-5, RM-5, R-4, RM-4, MH, MF-25, MF-33, MF-40, MF-50, TND, PUD, DR	1 per 114
O-1, O-2, NC, C-1, C-2, C-3, D	N/A
L, I-1, I-2	N/A

* The required acreage shall be rounded to the nearest one-tenth (e.g., 150 dwelling units x [1/114] = 150 x 0.009 = 1.3 acres)

- (2) The applicant may dedicate any trail specifically delineated in the Parks and Recreation System Plan (adopted January 1999) to the public. Any trail dedicated pursuant to this subsection will count towards meeting the required active parks and open space

requirements of Table 503-1. The trails shall be maintained in accordance with subsection (f)(Preservation of Parks and/or Open Space) of this Section.

- (3) The types of park or open space ~~that~~ which may be provided to satisfy the requirements of this Chapter are described in Table 503-2. The description of each category of park or open space is set forth in Column (B) of Table 503-2. Minimum dimension, improvement, and maintenance requirements shall be consistent with Column (C) of Table 503-2. (Note: set-aside provisions are set forth in Table 503-1). The applicant may choose among the types of parks or open space to include within the proposed development consistent with the overall minimum set-aside requirements of Table 503-1 and the requirements of subsection (d) of this Section.
- (4) The required park or open space areas shall be provided as common area for the use of all residents/occupants of the Proposed Development.
- (5) The following areas shall not be considered parks or open space pursuant to this subsection:
 - A. Areas covered by buildings, parking lots, or other impervious surfaces accessible to automobiles provided, however, that not more than fifty percent (50%) of a parking area accessory to, and reserved exclusively for, a park or open space area shall be counted toward the minimum land area required by this subsection.
 - B. Utility easements, drainage easements, or street rights-of-way, unless such areas are useable for public recreational purposes and will not be permanently converted to a street or trench. Land underneath overhead utility lines shall in no instance be considered a park/open space except where used for jogging trails, bicycle trails, or parking areas accessory to a park/open space.
 - C. Streets.
 - D. Ponds or lakes exceeding 2,500 square feet, unless surrounded by an upland area with a minimum width of twenty-five (25) feet.
- (6) Any excess capacity of a park or open space provided pursuant to this section may be credited toward the dedication required herein for another subdivision within a one-mile radius (subject to subsection (e)(1) of this section) or a benefit area for fees in lieu of dedication defined pursuant to subsection (c) of this section, where:
 - A. the subdivision for which the credit is applied is under Common Ownership by the same Applicant; and
 - B. the park/open space areas are accessible to each subdivision.

(c) Fee in Lieu of Land Dedication (Optional)

- (1) In lieu of dedicating and improving park or open space lands as required by this section, the applicant may deposit with the City a cash payment in lieu of land.
- (2) The Director of Parks and Recreation shall determine the amount to be deposited, based on the following formula:

$A \times V = M$
where

A =	the amount of land required for dedication as determined in subsection (b) of this Section.
V =	fair market value (per acre) of the property to be subdivided, as established by an appraisal.
M =	the number of dollars to be paid in lieu of dedication of land.

- (3) For purposes of computing fair market value of property (see “V” in the equation established in subsection (3), above), the subdivider may select one of the following fair market value determinations:
- A. the current fair market value of the land as shown on the records of the tax appraisal district if based upon an appraisal that occurred within two years prior to the application; or
 - B. the current fair market value of the land as determined by a qualified real estate appraiser at the subdivider's expense, if the City Real Estate Manager certifies that the appraisal fairly reflects the land value; or
 - C. the current fair market value of the land as determined by a qualified real estate appraiser employed by the City; or
 - D. the actual purchase price of the property as evidenced by a purchase money contract, or a closing statement (within one year of the date of application).
- (4) The city shall reduce the in-lieu fee by the amount of any reasonable costs for any land which has been dedicated to and accepted by the city for park/open space facilities by the applicant within the proposed development, subject to the following:
- A. The reasonable costs of the park/open space facilities that have been dedicated shall reduce the park/open space in-lieu fee due for only the same type of park facility.
 - B. The unit costs used to calculate the reduction shall not exceed those assumed as the average costs of the park/open space facilities which were used to compute the parks/open space in-lieu fee for the benefit area in which the property is located.
 - C. No reduction shall be granted that exceeds the park/open space in-lieu fee due for the development.
 - D. Any reduction created by the dedication of park/open space facilities shall expire ten years after the date that the offset was created.
 - E. An applicant may apply for a reduction of park fees either at the time of approval of a subdivision plat or at the time of dedication by separate instrument. The Applicant may appeal the determination of the Director of Parks and Recreation concerning the reduction to the city council.
 - F. The amount of the reduction shall be prorated among the number of dwelling units approved for the development unless otherwise agreed to by the city.

- (5) Park/open space in-lieu fees shall be assessed at the time of plat approval and shall be paid at the time of plat recordation.
- (6) All fees collected shall be used for the acquisition or development of land for a neighborhood park or development or construction of improvements to existing park land, within one (1) mile of the periphery of the proposed subdivision development. However, if [1] such acquisition opportunities are not available, or [2] existing park land is already developed or improved, within one (1) mile of the proposed subdivision development, then areas within two (2) miles of the periphery of the proposed subdivision development may be considered for the acquisition, of neighborhood park land and/or construction of improvements to existing park land within such periphery.
- (7) There is hereby established a special fund for the deposit of all fees collected under this subsection (c), which fund shall be known as the park acquisition and development fund. Within the fund, park development fees paid shall be earmarked for expenditure on park improvements in a neighborhood park generally located within the distance described in subsection (c)(6) ~~(7)~~, above. All fees in lieu of park land dedication and all park development fees paid must be expended within ten (10) years from the date of receipt for park facilities benefiting the residential subdivision or dwelling unit for which the fees are paid. Fees shall be considered expended if they are spent for acquisition or development, respectively, of neighborhood parks located ~~within one-half (1/2) to one (1) mile of the subdivision~~ as per section (c)(6) ~~(e)(7)~~ above for which the fees were paid within the ten-year period. If fees are not expended within such period, the then-current owner shall be entitled to a refund of the principal deposited by the Applicant in such fund, together with accrued interest. The owner must request such refund in writing within three hundred sixty-five (365) days of entitlement or such right shall be waived. Interest accruing to the park land dedication fund and to the park development fund shall be expended on neighborhood park land acquisition and for neighborhood park improvements, respectively.

(d) *Park and Open Space Characteristics*

(1) *Generally*

Land designated as a park or open space shall be maintained as a park or open space and may not be separately sold, subdivided, or developed except as provided below. Natural Areas, Greenways or Greenbelts shall not be cleared except as needed to provide Trails where permitted by § 35-503(b), above. The applicant shall provide at least one (1) acre of park /open space land if land is to be dedicated to the City, unless a fee in lieu is paid pursuant to subsection (c) of this Section.

(2) *Designation*

Any areas reserved as a park or open space shall be indicated on the Application for Development Approval. A Parks and Open Space Provision and Maintenance Plan shall be submitted as a part of the application for development approval including the project phasing schedule. This plan shall designate and indicate the boundaries of all proposed parks or open-space required by this Section. The plan shall:

- A. Designate areas to be reserved as a park or open space.

- B. Designate the type of park or open space that ~~which~~ will be provided.
- C. Specify the manner in which the park or open space shall be perpetuated, maintained, and administered.

(3) School Site Locations

Park sites shall be located, whenever possible, adjacent to and contiguous with school sites in order to make maximum use of common facilities and grounds. Land area dedicated to a school district shall be credited toward the minimum requirements of subsection (b) of this Section if there is a joint use agreement between the City and the school district.

(e) Suitability

In order to ensure that all designated parks and/or open space has suitable size, location, dimension, topography and general character, and proper road and/or pedestrian access, as may be appropriate, to be usable parks and/or open space, the following standards shall apply.

(1) Distance from lots

Parks and Open Space shall be not further than one (1) mile (5,280 feet) from any lot or, if the proposed development does not involve a subdivision, any primary building, measured from the entrance allowing people, bicycles or equestrians to enter into the park or open space or to view the park or open space area. The foregoing distance shall be measured in a straight line, provided that the distance shall not be interrupted by an existing Arterial Street or Freeway. The distance may be measured from a park or open space provided pursuant to this section, or a public park or public open space area not provided by the Applicant.

(2) Parks or Open Space in floodplains or water features

- A. Areas within a floodplain shall not exceed fifty percent (50%) of the area counted as Parks or Open Space pursuant to subsection (b), above, except as provided below.
- B. Water features exceeding 2,500 square feet shall not be considered as Parks or Open Space unless permitted by subsection C, below.
- C. The restriction on the maximum percentage of parks/open space in water features or floodplains (hereinafter "Restricted Areas") can be increased to seventy-five percent (75%) where:
 - 1. An area of not less than an average of twenty-five (25) feet in width surrounding a pond or adjacent to a floodplain is improved as a Greenway; and
 - 2. The structures or activities located with the Restricted Areas do not cause an increase in base flood elevations; and
 - 3. The velocities during a ten-year flood event do not exceed six (6) feet per second; and
 - 4. For parks/open space dedicated to the City, at least one (1) acre is outside of the floodplain.

(3) Percentage in retention or detention areas

Retention areas or detention basins which are required as part of the Stormwater Management Standards shall not qualify as a Park or Open Space area unless fifty percent (50%) or more of the active and usable area is above the twenty-five (25) year storm and is designed for multiple uses and the area(s) conforms to the requirements below.

- A. Retention or detention areas shall be included as part of a Greenbelt or a Greenway (see § 503-2, below). Retention or detention areas shall not be inundated so as to be unusable ~~unuseable~~ for their designated recreational purposes.
- B. Retention or detention areas shall be constructed of natural materials. Terracing, berming and contouring is required in order to naturalize and enhance the aesthetics of the basin. Basin slopes shall not exceed a three to one (3:1) slope.

(4) Landscaping

Parks or open space areas shall be landscaped where required by Table 503-2.

(5) Walls and Fences

Walls and fences, if used shall not exceed six (6) feet in height. This requirement shall not apply to fences used in conjunction with athletic fields and courts.

(6) Playground equipment

Playground equipment shall be located toward the interior of parks.

(7) Buffers (§ 35-510) or Landscaped Areas (§ 35-511)

Any buffer or landscaped area provided pursuant to § 35-510 or 35-511 of this Code which meets the requirements of Table 503-2 for a particular category of Parks or Open Space shall be credited toward the minimum Parks and Open Space requirements of subsection (b) hereto.

(8) Slopes

At least fifty (50) percent of required dedicated park or open space land shall have slopes not exceeding seven percent (7%).

(9) Access

Parks and/or open space provided pursuant to this Section shall have direct access to a public street or to a private street maintained by a Homeowners Association, Condominium Association, or Apartment Association.

(f) Designation of Parks/Open Space.

Areas designated as Parks or Open Space shall not be subdivided, but shall be shown as a "Park" or "Open Space" on a plat. In order to ensure that open-space areas are maintained so that their use and enjoyment as parks and/or open space are not diminished or destroyed, parks and/or

open-space areas may be owned, preserved, and maintained by any of the mechanisms described in subsections (1) through (6) below, or combinations thereof. Land protected pursuant to this subsection which is intended to be used as a park shall be deeded as a park, regardless of ownership. The instruments creating the dedication, homeowners association, condominium association, easement, transfer, or improvement district shall be provided with the application for subdivision plat approval.

(1) Dedication of Land to City

Dedication of the park or open space to the City shall satisfy the requirements of this subsection. Dedication shall take the form of a fee simple ownership. The City shall accept undivided parks and/or open space provided: (1) such land is accessible to the residents of the City; (2) there is no cost of acquisition other than any costs incidental to the transfer of ownership such as title insurance; and (3) the park/open space area meets the requirements of subsection (d)(1) of this Section.

(2) Homeowner's Association

A. Common ownership of the parks and/or open space by a permanent homeowner's association which assumes full responsibility for its maintenance. The restrictive covenants shall provide that, in the event that any private owner of parks and/or open space fails to maintain same according to the standards of this Chapter, the ~~City Council~~ Director of Parks and Recreation may, following reasonable notice and demand that deficiency of maintenance be corrected, enter the parks and/or open space to maintain same. The cost of such maintenance shall be charged to those persons having the primary responsibility for maintenance of the parks and/or open space. The association shall be formed and operated under the following provisions:

1. The developer shall provide a description of the association, including its bylaws and methods for maintaining the parks and/or open space.
2. The association shall be organized by the developer and shall be operated with a financial subsidy from the developer, before the sale of any lots within the development.
3. Membership in the association is automatic (mandatory) for all purchasers of homes therein and their successors. The conditions and timing of transferring control of the association from developer to homeowners shall be identified.
4. The association shall be responsible for maintenance of insurance and taxes on undivided parks and/or open space, enforceable by liens placed by the City on the association. The homeowners' association shall be authorized under its bylaws to place liens on the property of residents who fall delinquent in payment of such dues or assessments. Such liens may require the imposition of penalty interest charges. Should any bill or bills for maintenance of undivided parks and/or open space by the City be unpaid by November 1 of each year, a late fee of fifteen percent (15%)

shall be added to such bills and a lien shall be filed against the premises in the same manner as other municipal claims.

5. A proposed operations budget and plan for long term capital repair and replacement of the parks or open space shall be submitted with the final plat. The members of the association shall share the costs of maintaining and developing such undivided parks and/or open space. Shares shall be defined within the association bylaws. The operations and budget plan shall provide for construction of any improvements relating to the parks and/or open space within three (3) years following recordation of the plat.
 6. In the event of a proposed transfer, within the methods here permitted, of undivided parks and/or open space land by the homeowners' association, notice of such action shall be given to all property owners within the development.
 7. The association shall have or hire staff to administer common facilities and properly and continually maintain the undivided parks and/or open space.
- B. The homeowners' association may lease parks and/or open space lands to any other qualified person, or corporation, for operation and maintenance of park and/or open space lands, but such a lease agreement shall provide: (1) that the residents of the development shall at all times have access to the park and/or open space lands contained therein; (2) that the undivided parks and/or open space to be leased shall be maintained for the purposes set forth in this Chapter; and (3) that the operation of parks and/or open space facilities may be for the benefit of the residents only, or may be open to the residents of the City, at the election of the developer and/or homeowners' association, as the case may be. The lease shall be subject to the approval of the board and any transfer or assignment of the lease shall be further subject to the approval of the board. Lease agreements so entered upon shall be recorded with the County Recorder of Deeds within thirty (30) days of their execution and a copy of the recorded lease shall be filed with the City.
- C. Failure to adequately maintain the undivided parks and/or open space in reasonable order and condition constitutes a violation of this Chapter. The City is hereby authorized to give notice, by personal service or by United States mail, to the owner or occupant, as the case may be, of any violation, directly the owner to remedy the same within thirty (30) days.

(3) Condominiums.

The undivided parks and/or open space and associated facilities may be controlled through the use of permanent condominium agreements, approved by the City. Such agreements shall be in conformance with the Uniform Condominium Act, V.T.C.A. Property Code, Chapter 82. All undivided parks and/or open space land shall be held as a "common element." A proposed operations budget and plan for long term capital repair and replacement shall be submitted with the Application for Development Approval.

(4) Dedication of Easements.

The City may, but shall not be required to, accept easements for public use of any portion or portions of undivided parks and/or open space land, title of which is to remain in ownership by condominium or homeowners' association, provided: (1) such land is accessible to City residents; (2) there is no cost of acquisition other than any costs incidental to the transfer of ownership, such as title insurance; and (3) a satisfactory maintenance agreement is reached between the developer, condominium or homeowners' association, and the City. Land dedicated as a Natural Area, Greenway, or Greenbelt shall be subject to a duly executed conservation easement meeting the requirements of and enforceable in accordance with V.T.C.A., Natural Resources Code § 183.001 et seq., which easement shall be unlimited in duration.

(5) Transfer of Easements to a Private Conservation Organization.

An owner may transfer perpetual easements to a private, nonprofit organization, among whose purposes it is to conserve parks and/or open space and/or natural resources (such as a land conservancy), provided that:

- A. the organization is a bona fide conservation organization with perpetual existence;
- B. the organization is financially capable of maintaining such parks and/or open space;
- C. the conveyance contains legally enforceable provisions for proper reverter or retransfer in the event that the organization becomes unwilling or unable to continue carrying out its functions;
- D. the organization shall provide a proposed operations budget and plan for long term capital repair and replacement; and
- E. a maintenance agreement is entered into by the developer and the organization.

(6) Improvement Districts

An improvement district established pursuant to:

- A. the Public Improvement District Assessment Act, Tex. Local Gov't Code § 372.001 *et seq.*
- B. a Municipal Utility District established pursuant to Tex. Water Code, Chapter 54.
- C. Tax Increment Financing pursuant to Tex. Local Gov't Code, Chapter 374
- D. A development corporation established pursuant to Development Corporation Act, Tex. Rev. Civ. Stat. Ann. art 5190.6

(g) Development Phasing

- (1) The purpose of this subsection is to establish a procedure for enforcing the requirements for parks and open space through development phasing, while providing flexibility in the development approval process. This procedure recognizes that there is usually a delay between the date when a subdivision plat is approved and when lots are built upon and occupied, thereby creating a demand for parks and open space.

- (2) In residential subdivisions which are to be platted in two (2) or more phases, the required park or open space dedication, pursuant to this Section, must be provided in each phase of the subdivision except as provided in subsection (2)(3), below.
- (3) If the subdivision is proposed in phases and the proposed park or open space is shown on a Master Development Plan, the applicant may plat the first 114 lots pursuant to the Master Development Plan and defer the provision of parks and/or open space to future phases of the development provided, however, that:
- A. No further subdivision plat shall be approved unless and until parks or open space are provided in increments equal to the acreage required pursuant to subsection (b) of this Section, subject to the phasing provisions of Table 503-3 below; and

Table 503-3
Park and Open Space Requirements

Number of lots per phase	Acres of Parks or Open Space Required	Timing of Improvements
Phase 1: 1-114	Up to 1 (minimum size of 1 acre)	Phase 2
Phase 2: 115-128	Up to 2	Phase 3
Phase 3 through completion of development	As required by subsection (b) of this Section	At time of platting

- B. If any phase of the subdivision is platted without providing the required parks or open space at the time of platting and no future subdivision phases are planned pursuant to the Master Development Plan, the parks or open space required shall be provided within one (1) year after recordation of the plat and shall be secured by deferment contract as provided in subsection (4). The failure to provide parks or open space as provided herein shall be deemed a violation of this Chapter and shall be enforceable as provided in § 35-494.

Example: A Master Development Plan is approved for 500 residential lots. The Applicant may secure plat approval for the first 114 lots without providing parks or open space. The Applicant files a plat for approval of a second phase containing 150 lots. The second phase may not be approved until at least one (1) acre of parks or open space is provided based on the number of lots approved in Phase 1.

- (4) The city shall authorize the developer to reserve park land for dedication in subsequent phases of the subdivision by executing an enforceable contract with the City. The contract shall be approved by the City Attorney and city Director of Parks and Recreation. In addition, the developer shall dedicate a reversionary public access easement on the final plat of the proposed development where necessary to provide effective public access, maintenance and use of any park land to be dedicated.

(h) Private Facilities

- (1) Where a park or open space area is provided in a proposed residential subdivision and such area is to be privately owned and maintained by the future residents of the subdivision, credit may be given to the Applicant where the following requirements are met:

- A. The park or open space shall be maintained as provided in subsection (f) of this Section. The ultimate owner of the parks and/or open space shall be responsible for raising all monies required for operations, maintenance, or physical improvements to the parks and/or open space through annual dues, special assessments, or similar arrangements.
- B. The use of the private parks and/or open space is restricted for park and recreation purposes by recorded covenant, which runs with the land in favor or future owners of the property and which cannot be defeated or eliminated without the written consent of the city or its successors;
- C. The proposed private parks and/or open space shall be reasonably adaptable for use for park and recreational purposes, taking into consideration such factors as size, shape, topography, geology, access and location.

(2) The private parks and/or open space for which credit is given, or a combination of such and other recreational improvements that will meet the specific recreation park needs of the future residents of the area, shall conform to at least one of the elements of Table 503-4, Column (A). The element shall conform to the design criteria listed in Column (B) of Table 503-4. Credit shall be given toward the minimum land dedication requirement (see subsection (b) of this Section) at the rate specified in Column (C) of Table 503-4.

(3) Private park facilities shall have a street or streets on 25% of the perimeter border of the park site.

**Table 503-4
Private Park Facilities**

<i>(A)</i> <i>Criteria List</i>	<i>(B)</i> <i>Design Criteria</i>	<i>(C)</i> <i>Credit Acres</i>
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Playground	See Table 503-2 and subsection (3), below.	0.75
Picnic area.	Picnic areas shall have a <u>minimum</u> minimum area of 5,000 square feet. A picnic unit is defined as a concrete or metal picnic table and two benches with an adjacent trash receptacle. Tables and benches are to be permanently anchored to the slab. If a cooking grill is to be installed, it must be pedestal mounted at a corner of the slab. Each park must contain a ratio of two picnic units per acre, with a minimum of two picnic units installed in each picnic area. A minimum of 50% of picnic tables must be accessible, as defined by the ADA and any implementing regulations.	0.50
Athletic Courts	The court slab shall have a slope not exceeding two percent (2%) and shall be constructed of concrete. A basketball court must be a minimum of fifty feet by forty feet, with two metal goals, nets, backboards, and poles at each end. A tennis court must be a minimum of sixty feet by one hundred twenty feet, with metal net and posts.	0.50
Open Play Areas	An Open Play Area shall include a minimum area of 20,000 square feet per three (3) acres. The areas shall be unobstructed by trees, shrubs, or utilities, with a slope not to exceed five percent (5%). Common Bermuda grass shall be established in these areas.	Ratio of 4 square feet for every 1 square foot provided
Swimming pool	Minimum 2,500 square feet, with adjacent deck and lawn areas.	2.50
Recreation Center Building	The building shall be in habitable condition and shall have a minimum 1,000 square feet of gross floor area. The covenants and restrictions of the homeowner's association shall restrict the building for use as a recreational and/or meeting area for use by all residents of the subdivision. Architectural design shall conform to the restrictive covenants recorded for the subdivision.	1.50
Recreation community gardening	Community gardens shall have a minimum area of 10,000 square feet with a slope not exceeding two percent (2%).	0.25
Jogging or walking trails	Trails shall have a minimum length of one-quarter mile. Trails shall be constructed of either crushed granite or asphalt, with a minimum thickness of four inches, a minimum width of 8 feet, and shall be sloped to drain.	1.50

(4) Specifications for playgrounds as set forth in Table 503-4 shall conform to the following minimum requirements:

- A. The playground area shall have a slope not exceeding two percent (2%).
- B. Playgrounds are to include equipment for two distinct play abilities, one designed for ages 2 – 5 years old, and the second designed for ages 5 – 12 years old. The equipment may be located in the same or in separate areas.
- C. A transfer station required by the Americans with Disabilities Act (ADA) and the actual playscape structure (posts and railings) may not be included as one of the required activities.
- D. The following items shall be provided: at least two park benches and one trash receptacle.


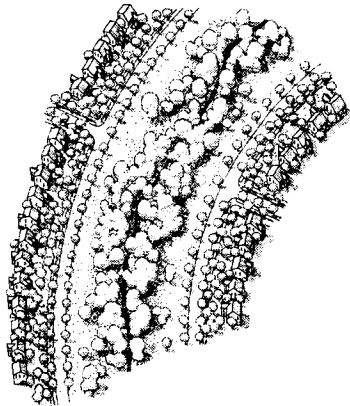
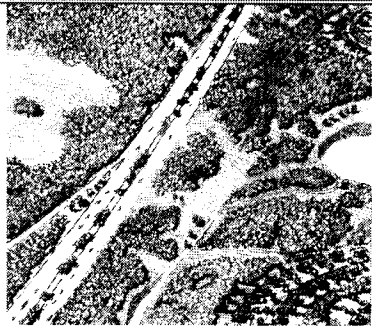

(i) Connectivity

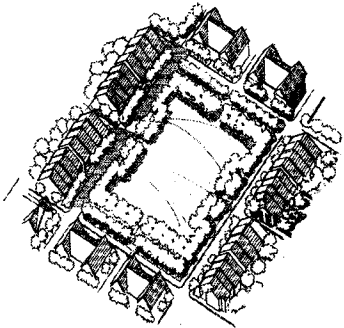
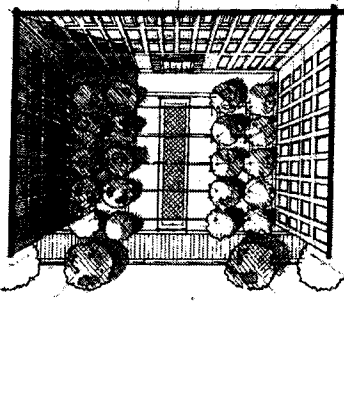
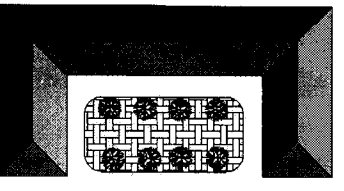
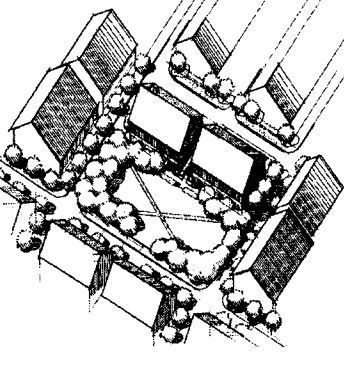
The City hereby finds and determines that an interconnected system of parks, trails, greenways, and bikeways provides a greater public benefit than isolated parks with access exclusively by automobiles. Such areas can provide form to neighborhoods, a common public gathering space, and an opportunity to protect natural areas. Accordingly, this section provides incentives for developers to link parks and open space provided pursuant to this section with park and open space areas provided pursuant to subsection (b) of this section. It is not the intent of this section to require developers or landowners to provide a general public benefit, but rather to create incentives for creativity in the design of parks and open space as well as creative opportunities to meet the requirements of this section.

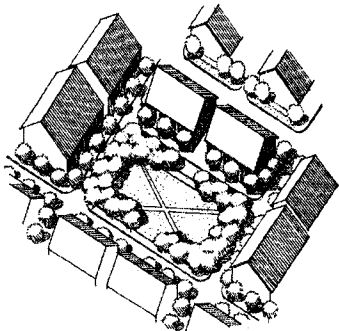
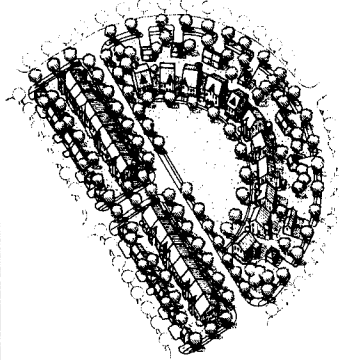

- (1) Greenbelts, Greenways, or Linear Parks provided pursuant to this Section shall be credited toward the minimum park and open space area requirements of subsection (b) of this Section at a ratio of one acre for every 20,000 square feet provided, where:
 - A. Such areas are aligned with an area designated as a public greenway, linear park, or similar facility in a facilities plan officially adopted by the City Council; and
 - B. Such areas include sidewalks, trails, or similar facilities which align with such facilities in an adjoining tract or, where adjoining tracts are unimproved, conform to the specifications set forth in the facilities plan.
- (2) Parks or Open Space provided pursuant to this subsection shall be credited toward the minimum park and open space area requirements at a ratio of one (1) acre for every 20,000 square feet provided, where:
 - A. all lots within the proposed subdivision are within one-quarter (1/4) mile of the park or open space, and
 - B. the park or open space area adjoins an area zoned “NC”, “C-1,” “TOD” or the area designated as a “Center” in a Traditional Neighborhood Development.

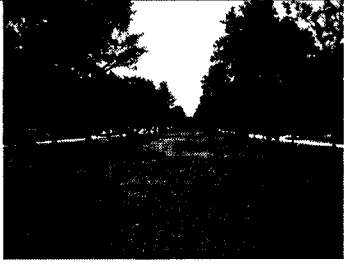
Table 503-2: Park and Open Space Categories

Table 503-2
Park and Open Space Categories

(A) Park or Open Space Cate- gory	(B) Description	(C) Maintenance Requirements	(D) Illustration
Natural Areas and Agricultural Areas	Natural Areas are areas established for the protection of natural attributes of local, regional, and statewide significance, which may be used in a sustainable manner for scientific research, education, aesthetic enjoyment, and appropriate use not detrimental to the primary purpose. These areas are resource rather than user-based, but may provide some passive recreational activities such as hiking, nature study, and picnicking. Natural Areas may include floodplains mapped by FEMA with a drainage area exceeding 300 acres, or creeks with a drainage area of less than 300 acres.	Maintenance is limited to a minimum removal and avoidance of hazards, nuisances, or unhealthy conditions. Natural water courses shall be maintained as free-flowing and devoid of debris. Stream channels shall be maintained so as not to alter floodplain levels.	
Greenways	Greenways are areas connecting residences and recreational areas. Greenways are designed to incorporate natural settings such as creeks and significant stands of trees within neighborhoods. Parkways and greenways differ from parks, plazas and squares in that their detailing is natural (i.e. informally planted) except along rights-of-way, and may contain irregular topography.	A Greenway may be counted as Open Space provided, however, that: (1) the greenway shall have an average width of not less than fifty (50) feet; and (2) if the greenway consists of agricultural areas, the agricultural areas shall have a continuous area of not less than fifty (50) acres. The agricultural areas may be combined with adjacent agricultural lands provided, however, that the minimum width prescribed above shall be met on all portions of the agricultural greenbelt on the site.	
Greenbelts	Greenbelts run along the perimeter of a neighborhood, and serve to buffer a neighborhood from surrounding non-compatible uses such as a highway corridor or industrial district, or from agricultural areas or adjacent neighborhoods. Greenbelts differ from the other types of open spaces in that they are left natural, and are not for recreational use.	There is no tree planting requirement along rights-of-way for greenbelts. The following uses are permitted within the greenbelt: (1) Critical Areas, (2) Conservancy Lots with a minimum lot size of five (5) acres and a maximum impervious surface ratio of five percent (5%), or (3) linear parks improved with trails, benches, and/or playground equipment. Trails, benches and playground equipment shall not be considered impervious surfaces for purposes of computing impervious surface. The Greenbelt shall be an average of not less than one-hundred (100) feet in width and not less than fifty (50) feet at any point.	
Playgrounds	Playgrounds provide play areas for children as well as open shelter with benches for parents. Playgrounds may be built within squares and parks or may stand alone within a residential block.	Minimum Size: 5,000 square feet Maximum Size: 20,000 square feet Playing surfaces may be covered in sand, wood chips, or other equivalent material. Paths and walkways may be paved in concrete, crushed gravel, brick paver, or similar material, or partially paved.	

(A) Park or Open Space Cate- gory	(B) Description	(C) Maintenance Requirements	(D) Illustration
Plazas	Plazas are areas for passive recreational use which are entirely bounded by Streets and/or lanes. Plazas are intended for master planned communities such as Planned Unit Developments (PUD's), or Traditional Neighborhood Developments (TND's), or for non-residential Use Patterns defined in Article 2 (Commercial Centers, Office or Institutional Campuses, and Commercial Retrofits).	<p>The plaza shall be square or rectangular with a length of not less than one and a half its width. The plaza shall be bounded on all sides by Streets, with Streets originating in the middle of each side, and two Streets originating from each corner.</p> <p>Minimum width: 200 feet Minimum length: 300 feet Maximum width: 530 feet Maximum length: 800 feet</p>	
Courtyard	A Courtyard is an open area adjacent to, or part of, a civic building or facility. Courtyards function as gathering places and may incorporate a variety of non-permanent activities such as vendors and display stands. Courtyards shall be credited toward Parks and Open Space requirements only for non-residential Use Patterns defined in Article 2 (Commercial Centers, Office or Institutional Campuses, and Commercial Retrofits), and shall be maintained in private ownership.	<p>Parking is permitted only at the edge of the Courtyard. Courtyards shall be paved in brick or other type of paver, or crushed stone. Courtyards shall be level, stepped, or gently sloping (less than 5% grade). At no time shall a Courtyard's horizontal length or width be greater than 3 times the height of the surrounding building(s).</p> <p>Minimum size: 2,000 sq ft Maximum size: 30,000 sq ft</p> <p>Courtyards may be left unplanted. If planted, the trees shall frame the Courtyard space or the structure which the Courtyard services. Tree spacing shall be a maximum of 25 feet on center.</p>	
Forecourt	Forecourts are open space areas which act as buffers between residential and non-residential buildings or Streets. Forecourts shall be credited toward Parks and Open Space requirements only for non-residential Use Patterns defined in Article 2 (Commercial Centers, Office or Institutional Campuses, and Commercial Retrofits), and shall be maintained in private ownership.	Forecourts shall be entirely bounded by Streets and shall be planted parallel to all Street right-of-ways with one tree species.	
Attached Squares	Attached Squares are areas for passive recreational use which are internal to a block.	<p>Squares shall be bounded by Streets on a minimum of three sides or 75% of their perimeter. Squares may be bounded by buildings on a maximum of 60% of their perimeter (maximum of 2 sides) in order to provide a central gathering area for the community.</p> <p>Squares shall be planted parallel to all rights-of-way with at least two (2) tree species a minimum of 10 feet and a maximum of 50 feet on center. All internal tree plantings (if provided) shall be in geometrical layouts.</p> <p>Minimum size: 2000 square feet Maximum size: 1 acre</p>	

(A) Park or Open Space Cate- gory	(B) Description	(C) Maintenance Requirements	(D) Illustration
Detached Square	Detached squares bordered on all sides by roads are particularly formal. Since adjacent buildings provide much of the population using any public space, detached squares are less likely to be used than other types though it remains appropriate as a means to symbolically enhance important places, intersections, or centers.	Detached Squares shall be planted along the perimeter of the Plaza or may be used to preserve a specimen tree or small stand of trees. The geometric pattern of the Square shall be square or a rectangle with a length not exceeding twice the width. Minimum Size: 200 sq ft Maximum Size: 1 acre	
Green	The green is an urban open space which is natural in its details. Like the square, it is small, civic, and surrounded by buildings. Unlike the square, it is informally planted and may have irregular topography.	Greens shall be landscaped with trees at the edges and open lawns at the center. Greens shall contain no structures other than benches, pavilions, and memorials. Trails or pedestrian pathways are optional.	
Park	Parks may be designed for active recreational use. Parks create a central open space which services an entire neighborhood or group of neighborhoods, or incorporate physical features which are an asset to the community (i.e. lake or river frontage, high ground, or significant stands of trees). Parks may be combined with parkways and greenbelts. Parks shall include at least three (3) of the facilities listed in the "Basic Facilities Menu" for Neighborhood Parks in the Parks and Recreation System Plan (page 230).	<u>Public Parks shall be bounded by Streets on a minimum of 50% of their perimeter (subject to lot line configurations). Private Parks shall be bounded by streets on 25% of their perimeter.</u> Minimum size: 1 acre Trees shall be planted parallel to all perimeter rights-of-way with one species type, a minimum of 15 feet to a maximum of 50 feet on center. Promenades, and Esplanades within a park may be formally planted with trees parallel to the walkway. Areas under dense tree plantings shall be paved with crushed gravel. Interior portions of parks may be kept free of tree plantings. Areas for active recreational use and any facilities which accompany such use shall have a tree planting design which integrates the structures into the park and defines the areas set aside for active use from areas of passive use. Plantings in interior portions of parks are encouraged to follow topographical lines.	

(A) Park or Open Space Cate- gory	(B) Description	(C) Maintenance Requirements	(D) Illustration
Parkway	Parkways are open spaces designed to incorporate natural settings such as creeks and significant stands of trees within neighborhoods. Parkways and greenways differ from parks, plazas and squares in that their detailing is natural (i.e. informally planted) except along rights-of-way, and may contain irregular topography.	<p>Parkways shall be entirely bounded by Streets or pedestrian rights-of-way within developed areas.</p> <p>Parkways may be used for certain active recreational uses such as walking, jogging, or bicycling.</p> <p>Trees shall be planted along all rights-of-way a minimum of 10 feet and a maximum of 50 feet on center, with one species type. Interior areas shall remain natural and any additional plantings shall be informal in design.</p>	

* * * * *

Chapter 35, Article V, Section 35-504 is amended as follows:

35-504 Storm Water Management

* * * * *

(a) Applicability

The provisions of this Section shall apply to any application for Subdivision Plat, Master Development Plan, or Building Permit approval except as otherwise provided by this Chapter. A Stormwater Management Plan shall be provided as set forth in Appendix B, § 35-B119 of this Chapter.

(b) Storm Water Management Program

(1) Regional stormwater management program (RSWMP).

- A. The City of San Antonio has determined that regional stormwater management is preferable to site specific stormwater mitigation. The regional stormwater management program provides for the administration, planning, design, construction, and operational management of regional storm water facilities (RSWF). Regional storm water management uses a watershed-wide approach to analyze potential flooding problems, identify appropriate mitigation measures and select site locations and design criteria for RSWF. These RSWF include, but are not limited to, regional detention and retention ponds, watershed protection, land purchase, waterway enlargement, channelization, and improved conveyance structures. The regional storm water management program allows developers to participate in the program rather than constructing the on-site detention controls required by this Section, where the resulting use of a RSWF will not produce a significant adverse impact to other properties due to the increased runoff from the proposed development.
- B. Options available to developers to participate in the RSWMP include:

1. Payment of a fee in lieu of on-site detention. The fee schedule is included in Appendix C-109.
 2. Construction of a RSWF to mitigate an existing flooding problem.
 3. Construction or participation in the construction of a RSWF to mitigate increased storm water runoff anticipated by ultimate development of the watershed.
- C. To determine a significant adverse impact for the purposes of this section, the following criteria will be used to analyze the receiving storm water facility for 2000 linear feet downstream of the project or to the nearest downstream RSWF, whichever is less. (The 2000 linear feet is based on an estimate that this length will approximate a 100-acre drainage area. The 100-acre drainage area represents the lower limit for a 100-year frequency stormwater facility design.)
1. The design storm water surface elevation (DSE) in the receiving storm water facility may not be increased within the 2000 linear feet from the development unless the increased DSE is contained within an easement or right-of-way or the receiving facility has sufficient capacity to contain the increased DSE without increasing flooding to a habitable structure.
 2. Where low water crossings exist within the study area, the DSE cannot be increased above the level of the 100-year ultimate development water surface at the low water crossing. The increase in flow at the low water crossing for the 5-year, 25-year and 100-year frequency design must not reclassify the low water crossing from a safe to a dangerous condition crossing based on Figure 504-2. If the increased DSE exceeds this criterion, the development can improve the low water crossing to the standards of this chapter in lieu of providing for onsite controls or paying a fee.
 3. Where a development is upstream of an existing San Antonio River Authority (SARA) flood control facility or other detention facility constructed prior to 2000, an analyses will be provided to insure that capacity exists within the facility to accommodate the increased runoff from the proposed development.
 4. The City of San Antonio may reject a developer's request to participate in the RSWMP and require on-site detention. The City's decision will be based on the knowledge of significant adverse impacts that would be created within the watershed by the proposed development regardless of the distance from the development to the area impacted. The City may also reject a request for participation when it is not in the best interests of the RSWMP. The developer is recommended to meet with the Storm Water Engineering Section of the Storm Water Utility to discuss participation options prior to commencing a project. This preliminary meeting in no way relieves the developer of his responsibility to prepare the necessary engineering documentation to support his request for participation.
- D. The storm water development fee in lieu of on-site detention must be paid prior to a plat being released for recordation by the City of San Antonio or the issuance of a building permit. The fee shall be determined in accordance with the provisions of Appendix C of this Code.

(2) System Criteria

- A. All Stormwater Management Facilities, or combination of facilities, shall be designed for ultimate development. Facilities with drainage areas under 100 acres shall be designed for a 25-year storm. Facilities with drainage areas over 100 acres or areas within a designated floodplain shall be designed for a 100 year storm or a 25-year storm plus freeboard (based on Table 504-9) if that elevation is higher. Detention facilities and streets are exceptions to the frequency criteria cited above. Detention facility outflows will be designed for 5-year, 25-year and-100 year frequency storms. Refer to § 35-504(g) for specific drainage design criteria for streets.
- B. Three development conditions shall be analyzed for each development.
1. Existing Conditions. This refers to current development conditions in the watershed and on site. Use as the baseline analysis for determining the impact of development.
 2. Proposed Conditions. This refers to existing conditions with the proposed development added. Use to determine if the increased runoff from the proposed development results in an adverse impact to other properties.
 3. Ultimate Conditions. This refers to ultimate development conditions within the watershed. Use to design the drainage facilities ~~Use to design the drainage facilities~~. This condition may be used in lieu of subsection 2, above, to determine if the increased runoff from the ultimate watershed development results in an adverse impact to other properties.

(3) Responsibility to Accept Stormwater

The owner or developer of property to be developed shall be responsible for the conveyance of all stormwater flowing through the property. This responsibility includes the stormwater flowing onto the property by any other developed property as well as the drainage naturally flowing through the property by reason of topography. Future upstream development shall be accounted for by assuming ultimate development when sizing drainage systems as specified in this Section.

(4) Positive Overflow Pathways

Stormwater Management Facilities for local drainage systems will be designed to ensure that a positive overflow pathway is provided to the nearest 100-year conveyance facility. The overflow pathway must be delineated on a plan that shows all existing structures in the vicinity impacted by the overflow pathway.

(5) Maintenance

- A. Maintenance of publicly owned facilities will be the responsibility of the city. Maintenance of private facilities is the responsibility of the property owner or the community association and must be specified in the maintenance schedule submitted to the city. A maintenance schedule for both publicly owned and privately owned facilities must be approved by the Director of Public Works prior to the approval of construction drawings.

- B. Authorized personnel from the City of San Antonio shall conduct periodic inspections of these facilities and structures. Any required repairs will be consistent with current construction standards. Maintenance issues identified by the City or State during inspections shall be the responsibility of the current owner.

(6) New development

Peak stormwater runoff rates from all new development shall be less than or equal to the peak runoff rates from the site's predevelopment conditions for the 5-year, 25-year and 100-year design storm events, except as provided in § 35-504(b)(1), above.

(7) Redevelopment

Peak stormwater runoff rates from an area of redevelopment due to zoning or replatting shall be less than or equal to the peak runoff rates produced by existing development conditions for the 5-year, 25-year and 100-year design storm events, except as provided in § 35-504(b)(1), above.

(c) Method of computing runoff.

(1) Calculation Methods

- A. For drainage areas less than six hundred forty (640) acres, the basis for computing runoff shall be the Rational Formula or some other method provided it is acceptable to the Director of Public Works. Hydraulic calculations shall be performed by using the U.S. Army Corps of Engineers HEC-2 "Water Surface Profiles" or HEC-RAS "River Analysis System" computer models. Normal depth channel calculations are permissible for constructed open channels with a uniform geometric cross section where 1) there is no potential for the water surface elevations to be controlled by backwater and 2) the channel is not in a FEMA floodplain.
- B. For drainage areas six hundred forty (640) acres or greater, the basis for computing runoff shall be a unit hydrograph method, preferably the Soil Conservation Service (SCS) Dimensionless Unitgraph method as contained in the U.S. Army Corps of Engineers Hydrologic Engineering Center HEC-1 "Flood Hydrograph Package," which document shall be maintained on file with the Director of Public Works and is hereby incorporated by this reference. For the SCS method, antecedent moisture condition II shall be used in the runoff model. Design rainfall values listed in Table 504-4 shall be used for hydrograph calculations.
- C. Open channel hydraulic calculations shall be performed by using the U.S. Army Corps of Engineers HEC-2 "Water Surface Profiles" or HEC-RAS "River Analysis System" computer models, which documents shall be maintained on file with the Director of Public Works and is hereby incorporated by this reference.
- D. Certain watersheds have hydrologic and hydraulic models that are available through and maintained by the City of San Antonio. Developments proposed within the limits of these watersheds must have the models updated by the

consultant to reflect changes in flow, channel configuration (including alterations to vegetation) and channel structures. The consultants' models must use the same computer program that was used in the existing model e.g. HEC-RAS models will not be accepted where the original model used HEC-2. The updated models shall be submitted to the Director of Public Works for incorporation into the master models. The City of San Antonio will periodically update the master models to reflect current watershed development conditions. The updated models will be made available for use and distribution as the latest existing condition models for the watershed.

(2) Time of Concentration

- A. Overland (sheet) flow, shallow concentrated flow and channel flows are components that need to be considered in the calculation of time of concentration. The following methods are recommended for time of concentration calculation.
- B. Overland flow – flow over plane surfaces: Maximum allowable time is 20 minutes. Minimum is 5 minutes. The Overland Flowtime chart from “Design” by Elwyn E. Seelye may be used to calculate overland flow times. Note that the minimum time has been reduced to 5 minutes.
- C. Shallow concentrated flow – overland flow usually becomes shallow concentrated flow after a maximum of 300 feet: Use Manning’s equation to estimate travel time for defined swales, bar ditches and street sections, etc. Figure 3-1 from TR-55 “Urban Hydrology for Small Watersheds”, SCS 1986, may be used where a geometric section has not been defined.
- D. Channel flow: Use existing computer models where available or Manning’s equation if data is not available. Non-floodplain channel velocities for ultimate watershed development should not be less than 6 fps when estimating time of concentration.

(3) Runoff Coefficients

Runoff coefficients (C value) for use in the Rational Formula shall not be less than the values shown in Tables 504-1A or 504-1B ~~Tables 504-1(a) or 504-1(b)~~, as appropriate.

Table 504-1A ~~504-1(a)~~
Runoff Coefficients (C) - Percentage

SLOPE

	Up to 1%	Over 1% up to 3%	Over 3% up to 5%	Flow over 5%
Business or commercial areas (90% or more impervious), Existing Pavement / Buildings or Zoning Districts O, C, I-1, I-2	95	96	97	97
Densely developed areas (80% to 90% impervious) or Zoning Districts D, MX, NC, TOD, Use Pattern TND	85	88	91	95
Closely built residential areas and school sites or Zoning Districts MF, R-4	75	77	80	84
Undeveloped areas * – Present land is undeveloped and ultimate land use is unknown. C values for use in ultimate development calculations.	68	70	72	75
Large lot residential area or Zoning Districts R20, RE	55	57	62	64
Undeveloped areas * – Existing conditions. See Table 504- 1(b)				
Average residential area or Zoning Districts R-5, R-6	65	67	69	72

**Table 504-1B 504-1(b)
Runoff Coefficients (C) - Percentage**

	SLOPE			
	Up to 1%	Over 1% up to 3%	Over 3% up to 5%	Flow over 5%
Cultivated or Range (Grass Cover < 50% of Area)	44	47	53	55
Range (Grass Cover 50-75% of Area)	37	41	49	53
Forest or Range (Grass Cover > 75% of Area)	35	39	47	52

* Areas included within parks, green belts or regulatory floodplains shall be considered to remain undeveloped per Table 504-1B 504-1(b).

(4) Rainfall Intensity

Use Figure 504-1 or Table 504-2 to determine rainfall intensity.

Table 504-2
Rainfall Intensities (inches / hour)

TIME MINUTES	FREQUENCY						
	2 YEAR	5 YEAR	10 YEAR	25 YEAR	50 YEAR	100 YEAR	500 YEAR
1	6.94	8.00	8.84	9.99	11.09	11.92	13.55
2	6.69	7.72	8.53	9.67	10.69	11.53	13.24
3	6.45	7.46	8.24	9.36	10.31	11.15	12.93
4	6.22	7.21	7.95	9.05	9.95	10.79	12.62
5	6.00	6.96	7.68	8.76	9.60	10.44	12.30
6	5.79	6.73	7.42	8.48	9.27	10.10	11.98
7	5.59	6.50	7.17	8.20	8.95	9.78	11.66
8	5.40	6.28	6.93	7.94	8.65	9.47	11.34
9	5.21	6.08	6.70	7.69	8.37	9.17	11.01
10	5.04	5.88	6.48	7.44	8.10	8.88	10.68
11	4.88	5.69	6.27	7.21	7.85	8.61	10.35
12	4.72	5.52	6.08	6.98	7.61	8.35	10.02
13	4.58	5.35	5.89	6.76	7.39	8.10	9.68
14	4.45	5.19	5.72	6.56	7.19	7.86	9.34
15	4.32	5.04	5.56	6.36	7.00	7.64	9.00
16	4.22	4.94	5.46	6.26	6.89	7.53	8.89
17	4.12	4.84	5.36	6.16	6.79	7.42	8.78
18	4.03	4.75	5.27	6.06	6.68	7.31	8.68
19	3.94	4.66	5.17	5.96	6.58	7.20	8.57
20	3.85	4.56	5.08	5.86	6.48	7.09	8.47
21	3.76	4.48	4.99	5.77	6.38	6.99	8.36
22	3.67	4.39	4.90	5.68	6.28	6.88	8.26
23	3.59	4.30	4.82	5.59	6.18	6.78	8.16
24	3.51	4.22	4.73	5.50	6.09	6.68	8.06
25	3.43	4.14	4.65	5.41	6.00	6.58	7.96
26	3.35	4.06	4.57	5.33	5.91	6.49	7.86
27	3.27	3.98	4.49	5.24	5.82	6.39	7.76
28	3.20	3.91	4.41	5.16	5.73	6.30	7.67
29	3.13	3.83	4.33	5.08	5.64	6.21	7.57
30	3.06	3.76	4.26	5.00	5.56	6.12	7.48
31	2.99	3.69	4.19	4.92	5.48	6.03	7.39
32	2.93	3.62	4.12	4.85	5.40	5.95	7.30
33	2.87	3.56	4.05	4.77	5.32	5.86	7.21
34	2.81	3.49	3.98	4.70	5.24	5.78	7.12
35	2.75	3.43	3.92	4.63	5.17	5.70	7.03
36	2.69	3.37	3.86	4.56	5.09	5.62	6.94
37	2.64	3.31	3.80	4.50	5.02	5.54	6.86
38	2.59	3.26	3.74	4.43	4.95	5.47	6.77
39	2.54	3.21	3.68	4.37	4.88	5.40	6.69
40	2.49	3.15	3.62	4.31	4.82	5.32	6.61
41	2.45	3.10	3.57	4.25	4.75	5.25	6.53
42	2.40	3.06	3.52	4.19	4.69	5.19	6.45
43	2.36	3.01	3.47	4.13	4.63	5.12	6.37
44	2.32	2.97	3.42	4.08	4.57	5.05	6.29
45	2.29	2.92	3.37	4.02	4.51	4.99	6.21
46	2.25	2.88	3.33	3.97	4.45	4.93	6.14
47	2.22	2.85	3.29	3.92	4.40	4.87	6.06
48	2.19	2.81	3.25	3.87	4.34	4.81	5.99
49	2.16	2.78	3.21	3.83	4.29	4.76	5.92
50	2.14	2.74	3.17	3.78	4.24	4.70	5.85
51	2.11	2.71	3.13	3.74	4.19	4.65	5.78

TIME	FREQUENCY						
MINUTES	2 YEAR	5 YEAR	10 YEAR	25 YEAR	50 YEAR	100 YEAR	500 YEAR
52	2.09	2.69	3.10	3.70	4.15	4.60	5.71
53	2.07	2.66	3.07	3.66	4.10	4.55	5.64
54	2.06	2.63	3.04	3.62	4.06	4.50	5.58
55	2.04	2.61	3.01	3.59	4.02	4.45	5.51
56	2.03	2.59	2.99	3.55	3.98	4.41	5.45
57	2.02	2.57	2.96	3.52	3.94	4.37	5.38
58	2.01	2.56	2.94	3.49	3.91	4.33	5.32
59	2.00	2.54	2.92	3.46	3.87	4.29	5.26
60	2.00	2.53	2.90	3.43	3.84	4.25	5.20
120	1.10	1.54	1.83	2.21	2.50	2.78	3.48
180	0.86	1.19	1.41	1.68	1.88	2.08	2.53
240	0.70	0.97	1.13	1.33	1.50	1.65	1.99
360	0.51	0.71	0.83	0.98	1.09	1.19	1.41
720	0.28	0.39	0.46	0.55	0.61	0.67	0.81
1440	0.165	0.227	0.273	0.324	0.366	0.413	0.513

RAINFALL INTENSITIES FOR SAN ANTONIO, BEXAR COUNTY, TEXAS

FOR VARIOUS FREQUENCIES AND DURATIONS
CITY OF SAN ANTONIO, TEXAS, JANUARY 1997
* REVISED JANUARY 1999

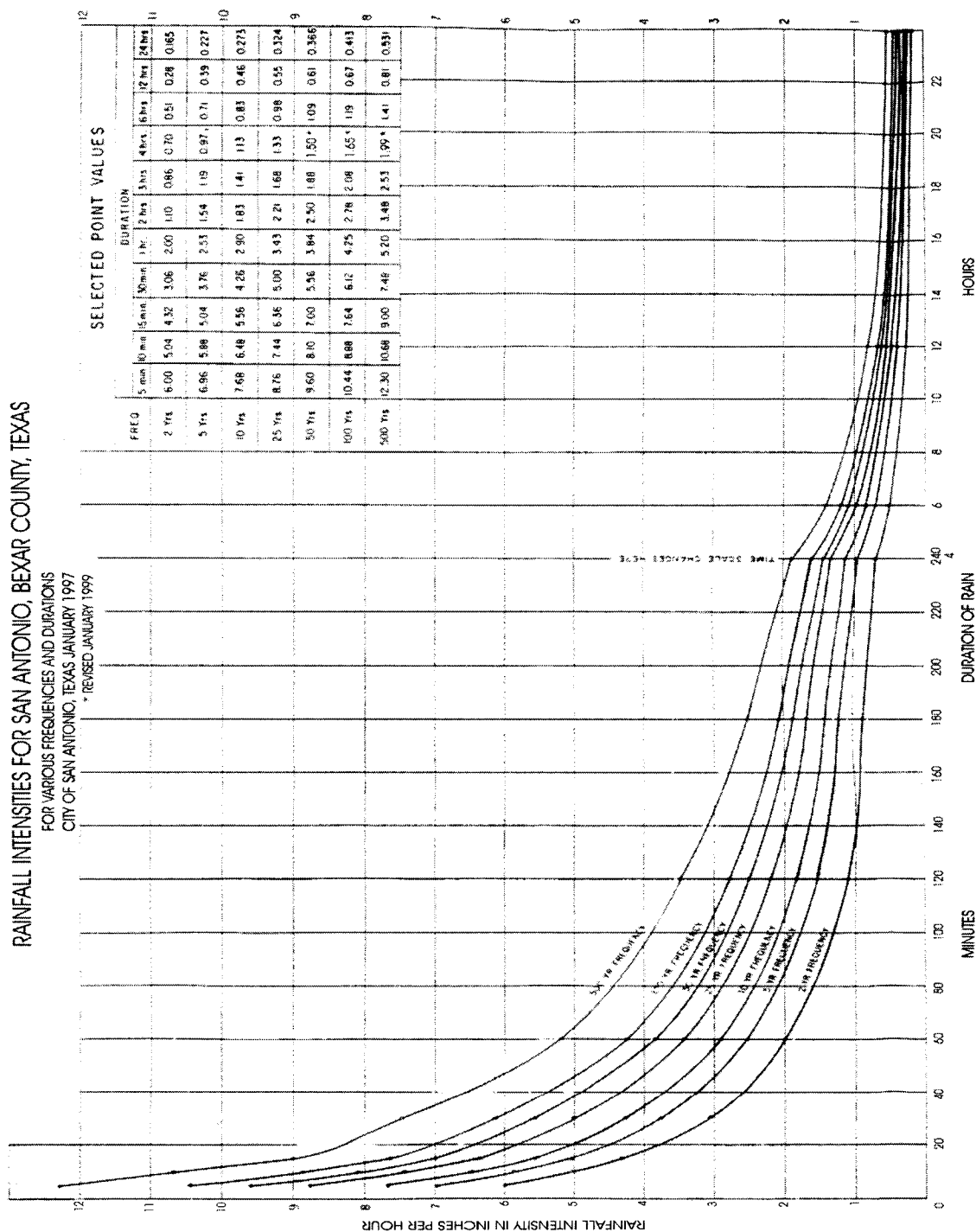


Figure 504-1

(5) SCS Curve Numbers

The SCS Curve Numbers adopted for use by the City of San Antonio are shown in Table 504-3. The hydrologic soil groups are listed in the latest version of the United States Natural Resources Conservation Service [formerly the Soil Conservation Service], "Urban Hydrology for Small Watersheds", Technical Release No. 55 (TR 55) which document is hereby incorporated by this reference. Soil types that relate to the hydrologic soil group may be found in the latest version of the United States Natural Resources Conservation Service "Soil Survey-Bexar County, Texas" which document is hereby incorporated by this reference. Soil types may also be based on a Geotechnical Engineering Report.

Table 504-3
SCS Curve Number by Soil Type

<i>Hydrologic Soil Group</i>	<i>Description</i>	<i>SCS Curve Number</i>
A	Soils having a low runoff potential due to high infiltration rates. These soils consist primarily of deep, well drained sand and gravels.	25
B	Soils having a moderately low runoff potential due to moderate infiltration rates. These soils consist primarily of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures.	55
C	Soils having moderately high runoff potential due to slow infiltration rates. These soils consist primarily of soils in which a layer exists near the surface that impedes the downward movement of water or soils with moderately fine to fine texture.	70
D	Soils having a high runoff potential due to very slow infiltration rates. These soils consist primarily of clays with high swelling potential, soils with permanently high water tables, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious parent material.	77

(6) Percent Impervious Cover

The percent impervious cover for typical land use types in San Antonio are presented in Table 504-4.

Table 504-4
Percent Impervious Cover by Land Use

<i>Land Use Category</i>		<i>Average Percent Impervious Cover</i>
Residential	1/8 acre Residential Lots, or Garden or Townhouse apartments, or Zoning Districts R-4, R-5, RM-4, RM-5; TND/TOD Use Patterns	65-85%
	1/4 acre Residential Lots or Zoning District R-6, RM-6	38%
	1/3 acre Residential Lots or Zoning District R-15	30%
	1/2 acre Residential Lots or Zoning Districts R-20	25%
	1 acre Residential Lots or Zoning Districts RP, RE	20%
Industrial or Zoning Districts I, I-1, I-2		72-85%
Business or Commercial, or Zoning Districts NC, O, C		85-95%
Densely developed (apartments), or Zoning Districts MF		65-85%
Streets, Roads, and Parking Areas		98%

(7) Design Rainfall

A twenty-four-hour rainfall distribution shall be applied for runoff calculations. Rainfall intensities as adopted for the City of San Antonio are given in Table 504-5 and should be used for HEC-1 input. The lag value for a subarea shall be calculated as 0.6 times the time of concentration.

Table 504-5
Design Rainfall Values (inches)

	<i>Frequency</i>					
	<i>5-year</i>	<i>10-year</i>	<i>25-year</i>	<i>50-year</i>	<i>100-year</i>	<i>500-year</i>
5 minute	0.58	0.64	0.73	0.8	0.87	1.03
15 minute	1.26	1.39	1.59	1.75	1.91	2.25
60 minute	2.53	2.9	3.43	3.84	4.25	5.2
2 hour	3.08	3.66	4.42	4.99	5.57	6.95

3 hour	3.57	4.23	5.04	5.64	6.23	7.6
6 hour	4.26	4.99	5.89	6.52	7.13	8.47
12 hour	4.68	5.55	6.58	7.32	8.05	9.68
24 hour	5.45	6.55	7.78	8.78	9.91	12.75

(8) Routing of runoff

Routing of the runoff hydrograph through the channel from one subarea calculation point to the next in the HEC-1 shall be computed using one of the following methods:

- A. Overbank/Channel storage not significant: Use Normal depth channel routing.
- B. Overbank/Channel storage is significant: Use the Muskingum method where a hydraulic model is not available. Use Modified Puls Storage method where a hydraulic model is available to develop storage/out flow relationship.
- C. Kinematic wave method For channel reaches where inflow from overbank runoff or multiple point sources (Example: storm sewer outfalls) is significant and where hydrograph attenuation is insignificant.

Channel routing methodologies currently being applied in the existing HEC-1 model of the watershed shall not be replaced with a different methodology without approval or direction from the Director of Public Works.

(9) Manning's Roughness Coefficient

Manning's roughness coefficients ("n" values) for use in routing methods or in hydraulic calculations shall be consistent with the values listed in Table 504-6

**Table 504-6
Manning's Roughness Coefficient**

Channel Description	Manning's "n" Value
Concrete Lined Channel	0.015
Grass Lined Channel with regular maintenance	0.035
Grass Lined Channel without recent maintenance	0.050
Vegetated Channel with trees, little or no underbrush	0.055
Natural Channel with trees, moderate underbrush	0.075
Natural Channel with trees, dense underbrush	0.090
Natural Channel with dense trees and dense underbrush	0.100

Overbank Description	Manning's "n" Value
Pasture	0.035-0.055
Trees, little or no underbrush, scattered structures	0.060-0.075
Dense vegetation, multiple fences and structures	0.075-0.090

The N value to be used in Manning's Formula shall conform to the following for design purposes:

- A. Earth channels--0.035
- B. Concrete lined channels--0.015
- C. Reinforced concrete pipe--0.013
- D. Concrete box culverts--0.013
- E. Corrugated metal pipe:
- F. Unpaved 1/2" corrugated--0.024
- G. Unpaved 1" corrugated--0.027

Any other N value shall be based on generally accepted engineering principles.

(d) Drainage easements / Rights-of-way.

(1) Applicability

Where a subdivision is traversed by a watercourse, drainageway, natural channel or stream, there shall be provided an easement or right-of-way conforming substantially to the limit of such watercourse, plus additional width as outlined below.

(2) Requirements

Easement or right-of-way requirements are specified in the following subsections of this Section for particular Stormwater Management facilities –

- A. (d)(3) Natural Watercourses or Floodplains
- B. (f)(3) Regional Detention Facilities
- C. (h)(6)(e) Concrete Lined Channels
- D. (h)(7)(c) & (d) Vegetated Earth Channels
- E. (i)(c) Storm Sewers

(3) Natural Watercourses or Floodplains

Easements for natural watercourses shall be the 100-year floodplain or the 25-year plus freeboard (see Table 504-9 of this Section) whichever is greater. In floodplain areas where ongoing maintenance is required or the floodplain will be reserved for use by the public, the drainage easements shall be maintained by or a public entity and the property will be dedicated to the city as a multi-use drainage easement. A driveable access way shall be provided in floodplain easements for the length of the easement when regular maintenance of the floodplain is required.

(4) Maintenance Access Right-of-Way

An unobstructed access right-of-way connecting the drainage easement with an alley or roadway parallel to or near the easement shall be provided at a minimum spacing of one access right-of-way at approximately one-thousand (1000) foot intervals. The access right-of-way shall be a minimum of fifteen (15) feet in width and shall be maintained clear of obstructions that would limit maintenance vehicular access. If the flow line of the designed channel incorporates grade control structures or vehicular bridges that would prevent maintenance equipment from accessing that portion of the channel, additional access points may be required. Channel design, earthen or concrete, shall have ramps in the side slopes near the access points that would allow maintenance equipment to descend to the floor level of the channel. The maximum allowable ramp slope for vehicular access is 7:1. Access points adjacent to roadways or alleys shall be provided with a post and cable feature with padlock to prevent unauthorized use.

(5) Lot and Property Line Crossings

In those cases where drainage easements cross lot and property lines, a statement shall be added to the plat that no fencing or structures that will interfere with adequate drainage flow will be

allowed on or across such lines. Fencing may be allowed across drainage easements only in accordance with the following restrictions:

- A. Bottom of fence shall be a minimum of the flow depth, plus freeboard (see Table 504-9 of this Section) above design flow line of channel or drain.
- B. A hinged gate will be placed across the entire width of the drainage easement.
- C. Fence posts located within the easement must be structurally designed to resist damage from the storm water flows and impact from debris.
- D. A floodplain development permit will be required to construct a fence within an easement within the 100-year floodplain.

(6) *Interceptor easements*

Interceptor drainage easements and channels shall be provided where the drainage area to the back of platted lots exceeds the depth of two average residential lots. Interceptor drains shall be constructed prior to the issuing of building permits on any lot that would be affected by natural drainage being intercepted.

(7) *Lower elevation of Site*

All developments shall provide for adequate drainage outfall at the lower end of the site into an existing street, alley, drainage, easements or right-of-way, or to the centerline of an existing natural drain. Where proposed street, storm sewer, or open channel does not discharge into a natural low or into an existing adequate drainage easement then facilities and drainage easements of adequate width to contain the design discharge shall be constructed and dedicated to the centerline of an existing natural low within the same watershed. However, where the natural low lies within the developer's property, the developer will be required only to plat an easement to the centerline of the natural low, provided that the easement is adequate to accommodate the facilities that will be built in conjunction with the future development of that property.

(e) *Site Design and Grading*

- (1) All land disturbing or land filling activities or soil storage shall be undertaken in a manner designed to minimize surface runoff, erosion and sedimentation, and to safeguard life, limb, property and the public welfare in accordance with the NPDES (TPDES) Construction Site Regulation Ordinance, Ordinance No. 94002, as amended, and the document entitled "Complying with the Edwards Aquifer Rules; Technical Guidance on Best Management Practices, " by Michael E. Barrett, Ph.D., P.E. Center for Research in Water Resources, Bureau of Engineering Research, University of Texas at Austin, (RG-348, June 1999), which documents are hereby incorporated by this reference.
- (2) A note must be placed on the plat for residential lots, which states that finished floor elevations must be a minimum of eight (8) inches above final adjacent grade. A grading plan shall be prepared and submitted to the City of San Antonio, which indicates typical lot grading for all lots in the subdivision using typical FHA lot grading types (A, B & C). A more detailed grading plan is also acceptable. No more than two average residential

lots may drain onto another lot unless a drainage easement is dedicated to contain the runoff.

(f) Stormwater detention

For projects with an increased impervious area of greater than 0.1 acres, that elect not to participate or are not eligible to participate in the Regional Storm Water Management Program as described in Section 35-504 (b)(1), then storm water detention shall be required for all new developments or redevelopment of individual parcels of property to mitigate peak flow rates to predevelopment or existing development conditions as stated in subsections (b)(6) and (b)(7) of this Section.

(1) Maximum outflow rate

The maximum allowable outflow rate from the detention facility must be restricted to the flow rate from the undeveloped or existing development tract for the 5-year, 25-year and 100-year frequency. Best management practices shall be used in the design of detention facilities in accordance with this Section. The timing of the hydrograph released from the detention facility must be checked against the timing of the flow rate in the first open watercourse to prevent any increase in the peak flow rate in the receiving watercourse. For detention basins constructed in-line on an existing watercourse, the creation of the basin shall not increase flood elevations in the channel upstream of the new development boundaries.

(2) On-site detention

On-site detention facilities must be privately owned and shall be maintained by the community association or property owner. A maintenance schedule shall be submitted to the public works department and approved by the Director of Public Works prior to approval of construction plans. The City of San Antonio will have the right to do periodic inspections of privately owned and maintained detention facilities to ensure that the maintenance schedule is being implemented.

Where a detention facility accepts flows from public facilities such as City right-of-ways, the detention facility will be considered a detention facility serving a public purpose and will be dedicated to the City upon completion and a drainage easement will be dedicated to provide for access to the facility. When a detention facility accepts flow from an area exceeding 300 acres, the facility shall ~~will~~ be considered a regional facility serving a public purpose and shall ~~may~~ be dedicated to the City.

(3) Regional Detention Facilities

- A. General locations and sizes of regional detention facilities have been identified in the master drainage plan for the major watersheds in the city's jurisdiction. The ownership of regional detention facilities may either be public or private. The creation of regional detention facilities designed to service one or several developments is encouraged, but not required. In watersheds where public regional detention facilities exist, mitigation of increased storm water runoff from new construction may utilize these facilities if the new construction is eligible to participate in the RSWMP. Temporary detention may be required for the development until sufficient capacity in the outfall channel is provided to

accommodate increased flows. Maintenance of publicly owned facilities will be the responsibility of the city. Maintenance of private facilities is the responsibility of the property owner or the community association and must be specified in the maintenance schedule submitted to the city. A maintenance schedule for both publicly owned and privately owned facilities must be approved by the Director of Public Works prior to approval of construction drawings.

- B. Drainage easements will be provided for all regional detention facilities. The easement will encompass the 100-year pool elevation plus all structural improvements (levees, dykes, berms, outfall structures etc.) necessary to contain the pool. The easement will extend, at a minimum, to the toe of the downstream embankment. Maintenance access (15' minimum) will be provided around the facility, outside the limits of the 100-year pool elevation. Ramps, as necessary, with a maximum slope of 7:1 will be provided for access to the flowline of the facility.

(4) Multi-Use Facilities

Multi-use facilities are encouraged, but not required (Multi-use facilities allows for water quality, satisfy NPDES requirements, enhance around water recharge, provide open space, provide recreation or other amenities, and/or provide habitat) and may be utilized so long as the facility meets the standards set forth in subsection (a) of this Section and does not increase the rate or volume of erosion above that which would result from the use of a facility without multiple uses. The use of multi-use detention facilities to alleviate existing flooding problems, enhance and provide amenities for older neighborhoods, and support the revitalization of economically depressed areas is encouraged in public and private redevelopment initiatives.

(5) Permanent Wet Pool Or Pumped Detention Systems

Stormwater retention with permanent wet pool or pumped detention systems will not be acceptable methods of stormwater mitigation unless the facility will remain privately owned, operated, and maintained. The city will approve the use of a pumped facility for private use under the following conditions:

- A. A gravity system is not feasible from an engineering and economic standpoint.
- B. At least two (2) pumps are provided each of which is sized to pump the design flow rate;
- C. The selected design outflow rate must not aggravate downstream flooding.
- D. Controls and pumps shall be designed to prevent unauthorized operation and vandalism.
- E. Adequate assurance is provided that the system will be operated and maintained on a continuous basis.

(6) Location of Detention Facilities and Surrounding Development

Stormwater detention facilities shall be located in topographically depressed areas where possible. When necessary, dams may be constructed to detain flows. All proposed dams shall conform to the following items:

- A. All dams over six (6) feet above existing natural around shall be approved by the Dam Safety Team of the TNRCC for safety. All other new dams shall be designed in accordance with acceptable design criteria as approved by the Director of Public Works, or his authorized representative.
- B. All hydrology and hydraulic properties of a dam will be reviewed by the department of public works with regard to spillway design, freeboard hydraulics, backwater curves and downstream effects due to the dam site.
- C. The spillway section of any earthen dam with a height greater than six (6) feet shall be large enough to pass a PMP (probable maximum precipitation) flood, as defined by the NRCS, without overtopping the crest of the dam in accordance with TNRCC regulations.
- D. A 100-year frequency flood shall be routed through the proposed dam and all land subject to flooding shall be dedicated as drainage easement or right-of-way. An unobstructed fifteen-foot access easement around the periphery of the flooded area shall be dedicated as drainage easement for facilities that require regular mowing or other ongoing maintenance, at the discretion of the Director of Public Works. An unobstructed fifteen (15) foot feet access right-of-way shall be established which connects the drainage easement adjacent to the dam structure to a road or alley.
- E. Development below existing dams will take into account the original design conditions of the existing dam. Dam breach analysis checks will be required, dependent upon location of development with respect to dam site.
- F. All spillway discharges shall be adequately routed to the centerline of the natural low below the dam site. The adequate routing of spillway discharges pertains to the hydraulic routing of the 100-year frequency flood for dedication of drainage easement limits. Probable Maximum Precipitation (PMP) defined PMP on definition section flood routing or breaches will only be considered for safety considerations (that is, the placement of building and the setting of minimum floor slab elevations below the dams). Any proposed concrete dam structure need not have spillway capable of routing a PMP flood, however, it shall be shown to be structurally capable of withstanding any range of flood conditions with regard to possible failure due to sliding, overturning, and structural integrity, up to and including the PMP flood.

(g) Streets

(1) Generally

- A. Design of streets shall consider public safety and limit potential conflicts between stormwater conveyance, traffic, parking, pedestrian access, ADA requirements, and bicycle traffic.
- B. Streets draining a watershed greater than 100-acres must be designed for the 100-year frequency storm.

- C. Streets may be used for storm water drainage only if the calculated storm water flow does not exceed the flows outlined in Table 504-7 ~~504-6~~ or the velocity does not exceed ten (10) feet per second.
- D. Where Streets are not capable of carrying storm waters, as outlined above, inlets or curb openings discharging to drainage channels or storm sewers shall be provided. Partial flow past the inlet will be allowed when the capacity of all downstream Street systems can accommodate the flow.
- E. Street width shall not be widened beyond the width as determined by the Street classification for drainage purposes.
- F. Stormwater conveyance on Streets shall be designed to account for the cumulative impact of peak flows and runoff volumes on the system as the stormwater ~~it~~ progresses downgrade.
- G. Curb cuts for driveways on all Streets shall be designed for compatibility with the stormwater conveyance function of Streets.
- H. Potential flooding problems or conflicts at the connection points where new or modified drainage systems (including Streets, storm sewers, etc.) and the existing portions of the downstream Street system and stormwater conveyance system shall be identified and resolved either in the design of the new or modified drainage system or in modifications to the existing system.
- I. Dwelling Units located on the downhill side of a T-intersection with a Street or drainage channel discharging onto the intersection shall be sited so as to avoid obstruction of the drainage patterns.

(2) Primary and Secondary Arterial Streets

An arterial street is a street so designated on the current major thoroughfare plan. One lane in each direction on arterial streets shall remain passable with a flow depth not to exceed 0.30 feet during a 25-year storm event. The maximum depth of water in the street section must not exceed seven (7) inches (the height of a standard city curb).

(3) Local "B" and Collector Streets

A maximum flow depth to the top of curb on a standard local "B" and collector street section will be allowed during a 25-year storm event. A collector street is a street with a width of forty-four (44) feet or more and not shown as an arterial street on the current major thoroughfare plan.

(4) Local "A" Streets

Local "A" Streets shall be designed on a basis of a five (5) year frequency. A 25-year frequency storm must be contained within the street right-of-way.

(5) Alleys

Alleys shall be designed for five (5) year frequency within the limits of the alley pavement/curbs and twenty-five (25) year frequency within the right-of-way/easement to carry storm water.

(6) Traditional Street Design

Traditional street design shall conform to the storm frequency requirements of the standard street designs listed above as follows:

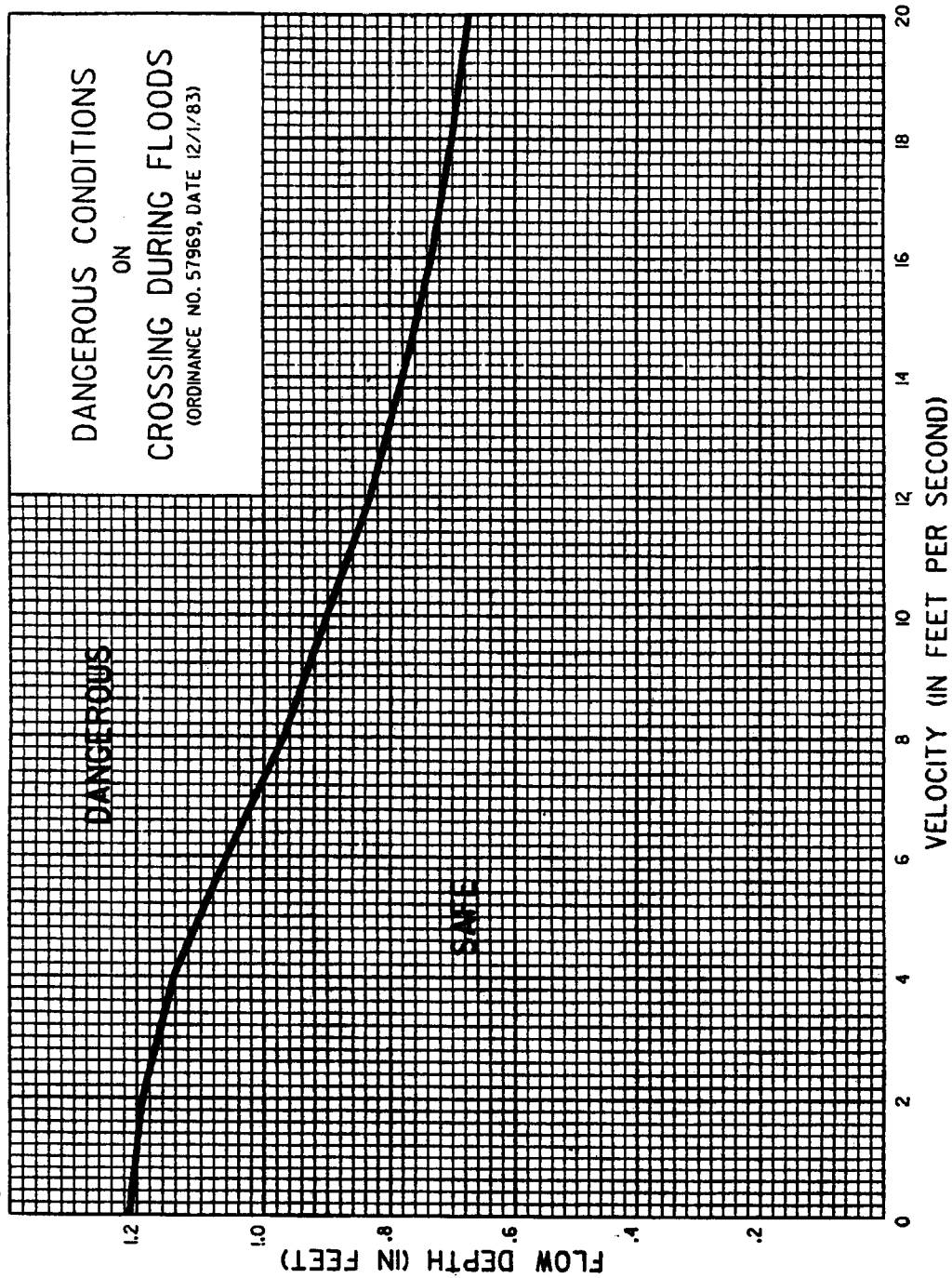
- A. Trails, Alleys and Lanes – Use Alley design criteria.
- B. Local Street or Avenue – Use Local (A) Street design criteria.
- C. Main Street– Use Local (A), Local (B) or Collector Street design criteria depending on the pavement widths. Use Local (A) criteria where pavement width is less than 34'.
- D. Boulevard or Parkway – Use Arterial Street design criteria.

No flow capacity Tables are provided for the Traditional Street Designs due the variety of geometric properties associated with these streets. Drainage calculations specific to a proposed Traditional Street Design must be submitted for approval with every project where a Traditional Street Design is proposed.

(7) All-Weather Crossings

- A. Where Streets cross existing or proposed watercourses, all weather crossings shall be required. Culverts or bridges shall be adequate to allow passage of the design storm identified in Section 35-504(b)(1)
- B. All crossings, culverts and bridges shall be designed for an H-20-44 or HS-20 loading.
- C. Dangerous conditions for existing crossings are defined by Figure 504-2 (Dangerous Conditions on Crossing During Floods).

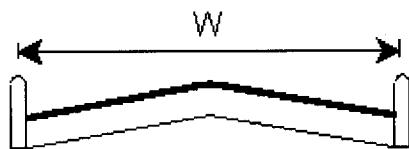
Fig 504-2 Dangerous Conditions on Crossings During Floods.



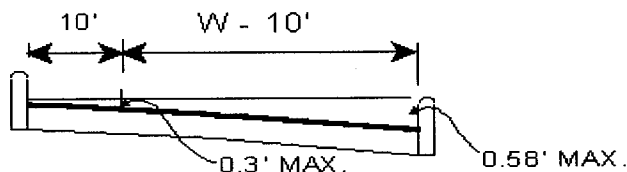
(Ord. No. 65513, § 2(f), 8-13-87)

Figure 504-1

Table 504-7 504-6
Storm Drainage, Street Velocities & Capacities, Manning's N=0.018



Local / Collector Street



Primary or Secondary Streets

STORM DRAINAGE
STREET VELOCITIES AND CAPACITIES
Manning's n=0.018

Slope %	LOCAL TYPE "A" W= 30'		LOCAL TYPE "B" W=40'		COLLECTOR W=44'		SECONDARY (W/MEDIAN) Maximum Water Depth = 7" W=24' Min. and 29' Max.		PRIMARY & Secondary (W/O MEDIAN) Maximum Water Depth = 7" W=24' Min. and 29' Max.	
	Q cfs	V f/s	Q cfs	V f/s	Q cfs	V f/s	Q cfs	V f/s	Q cfs	V f/s
0.40	35.4	2.8	47.8	2.9	44.1	2.7	20.6	2.5	19.2	2.3
0.45	37.5	3.0	50.7	3.0	46.8	2.8	21.9	2.7	20.4	2.4
0.50	39.6	3.2	53.4	3.2	49.3	3.0	23.1	2.8	21.5	2.5
0.55	41.5	3.3	56.0	3.4	51.7	3.1	24.2	2.9	22.5	2.7
0.60	43.3	3.5	58.5	3.5	54.0	3.3	25.3	3.1	23.6	2.8
0.65	45.1	3.6	60.9	3.7	56.2	3.4	26.3	3.2	24.5	2.9
0.70	46.8	3.8	63.2	3.8	58.4	3.5	27.3	3.3	25.4	3.0
0.75	48.5	3.9	65.4	3.9	60.4	3.7	28.3	3.4	26.3	3.1
0.80	50.0	4.0	67.6	4.1	62.4	3.8	29.2	3.5	27.2	3.2
0.85	51.6	4.1	69.6	4.2	64.3	3.9	30.1	3.7	28.0	3.3
0.90	53.1	4.3	71.7	4.3	66.2	4.0	30.9	3.8	28.8	3.4
0.95	54.5	4.4	73.6	4.4	68.0	4.1	31.8	3.9	29.6	3.5
1.00	55.9	4.5	75.5	4.5	69.8	4.2	32.6	4.0	30.4	3.6
1.50	68.5	5.5	92.5	5.5	85.4	5.2	40.0	4.9	37.2	4.4
2.00	79.1	6.4	106.8	6.4	98.6	6.0	46.1	5.6	43.0	5.1
2.50	88.5	7.1	119.4	7.2	110.3	6.7	51.6	6.3	48.1	5.7
3.00	96.9	7.8	130.8	7.8	120.8	7.3	56.5	6.9	52.7	6.2
3.50	104.7	8.4	141.3	8.5	130.5	7.9	61.0	7.4	56.9	6.7
4.00	111.9	9.0	151.1	9.1	139.5	8.5	65.2	7.9	60.8	7.2
4.50	118.7	9.5	160.2	9.6	148.0	9.0	69.2	8.4	64.5	7.6
5.00	125.1	10.0	168.9	10.0	156.0	9.5	72.9	8.9	68.0	8.0
5.50	116.0	10.0	153.0	10.0	163.6	9.9	76.5	9.3	71.3	8.4
6.00	108.0	10.0	143.0	10.0	157.0	10.0	79.9	9.7	74.5	8.8
6.50	102.0	10.0	134.0	10.0	148.0	10.0	81.0	10.0	77.5	9.1
7.00	96.0	10.0	127.0	10.0	140.0	10.0	76.0	10.0	80.4	9.5
7.50	91.0	10.0	120.0	10.0	132.0	10.0				
8.00	87.0	10.0	115.0	10.0	126.0	10.0				
8.50	83.0	10.0	110.0	10.0	120.0	10.0				
9.00	79.0	10.0	105.0	10.0	115.0	10.0				
9.5	76.0	10.0	101.0	10.0	111.0	10.0				
10	73.0	10.0	97.0	10.0	106.0	10.0				

W = Width of ponded water.

(h) Drainage channels and watercourses.

This section addresses proposed improvements or modifications to drainage channels and watercourses required to convey stormwater runoff from or through the proposed development. Refer to Section 35-504 (b)(1) for storm frequency design criteria.

(1) Watercourses to remain unobstructed

Except as authorized by a development plan approved by the Director of Public Works or his designee, no person shall place or cause to be placed any obstruction of any kind in any watercourse within the city and its ETJ. The owner of any property within the city, through which any watercourse may pass, shall keep the watercourse free from any obstruction not authorized by a development plan.

(2) Channel modifications

- A. Modifications to existing watercourses or newly created open channels may be designed as earth channels, sod channels ~~sodded~~, or as concrete lined channels. Liners other than sod or concrete which enhance the aesthetics or habitat value of the watercourse and which reduce future maintenance requirements are encouraged. Preliminary planning for the applicability of other channel liners shall be reviewed with the Director of Public Works or his representative prior to the submittal of construction plans for approval.
- B. Natural Unimproved Waterways. Runoff that results from upstream development and is discharged to an unimproved waterway can cause flood damage to properties adjacent to the waterway. Natural undeveloped waterways do not receive regular maintenance. Design of natural waterways shall take into consideration fluvial geomorphologic principals and practices. Consulting Engineers and Development Review officials shall work to resolve potential downstream impact issues.

(3) Maintenance

Design of new channels or alterations to existing channels shall consider future maintenance requirements. A maintenance schedule for any private channel shall be submitted to and approved by the Director of Public Works prior to approval of construction plans. Maintenance requirements of concrete channels consist of de-silting activities, prevention of vegetation establishment in construction joints, and repair of concrete as necessary. Maintenance of earthen channels includes regular observation and repair as necessary of erosion, scouring, and removal of silt deposits, as necessary to maintain design parameters. Developers shall be responsible for maintaining newly planted channels until coverage is established throughout 85 percent of the area. This area shall include slopes, floor, and any attendant maintenance easement. New earthen channels shall be planted with drought resistant, low growth, native species grasses, which will allow unobstructed passage of floodwaters. Johnson Grass ~~Johnsongrass~~, Giant Ragweed and other invasive species shall not be allowed to promulgate in channels. Suggested species shall include, but not be limited to, Common Bermuda, Coastal Bermuda, Buffalo Grass, Sideoats Grama, Seep Muhly, Little Bluestem, and Indian Grass ~~Indiangrass~~. Mowing frequencies vary

with the vegetation growth rates, but is required when the grass exceeds the design roughness coefficient of the channel.

(4) Multiple Uses

Planned multiple-use of a watercourse is allowed (e.g. bike paths or greenbelt). If multiple use of the watercourse is to be incorporated, the Applicant shall form a property owners association that shall assume maintenance responsibility for private amenities. The appropriate government agency will be responsible for maintenance of public amenities. The Applicant shall provide overlay easements for public or private use.

(5) Velocity Criteria

Table 504-8 shall be used to determine the maximum permissible channel velocity type of Stormwater Management Facility that shall be used.

**Table 504-8
Velocity Control**

Velocity (fps)	Type of Facility Required	Hydraulic Radius (ft.)	Correction Factor	Maximum Permissible Velocity (fps)
1 to 6 (Maximum Average Velocity = 6 fps)	Vegetated Earthen Channel	0-1	0.8	5
		1-3	0.9	5.5
		3-5	1.05	6.3
		5-8	1.15	6.9
		8-10	1.225	7.35
		Over 10	1.25	7.5
6 to 8	Concrete Retards	NA	NA	NA
> 8	Concrete Lining or Drop Structures	NA	NA	NA

- A. Where velocities are in the supercritical range, allowance shall be made in the design for the proper handling of the water.
- B. Ensure that the channel will contain the hydraulic jump (sequent depth) throughout the extent of the supercritical profile. An exception to this criteria is where concrete lined lateral channels discharge down the side slopes of channels. These channels may be designed for normal depth plus freeboard provided velocity controls are established at the main channel flowline.
- C. Ensure that the energy grade of the channel will not result in upstream flooding at existing or proposed lateral facility connections.

(6) Retard Spacing

Retard spacing shall be computed as follows when using the City standard retard section Figure 504-3 and the following equations:

RETARD SPACING CRITERIA

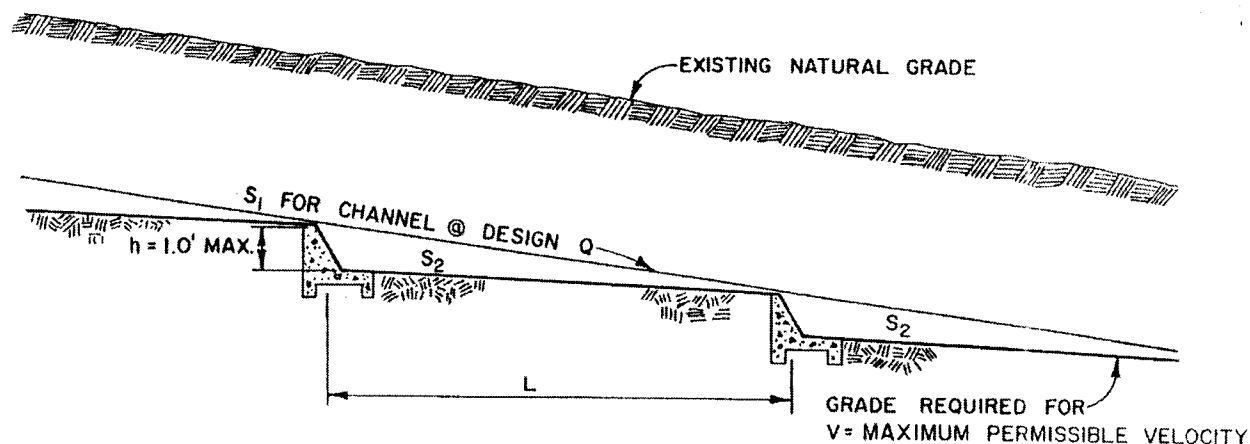


Figure 504-2

$$L = 1.0' \div (S1 - S2)$$

Where: L = Distance required between retards in feet.

S1 = Actual slope of channel in ft./ft.

S2 = Slope of proposed channel for maximum permissible velocity established from Table 504-8, i.e.:

And

$$S2 = [(NV) \div (1.486R^{2/3})]^2$$

Where: V = maximum permissible velocity established from Table 504-8

N = .035

R = area/wetted perimeter

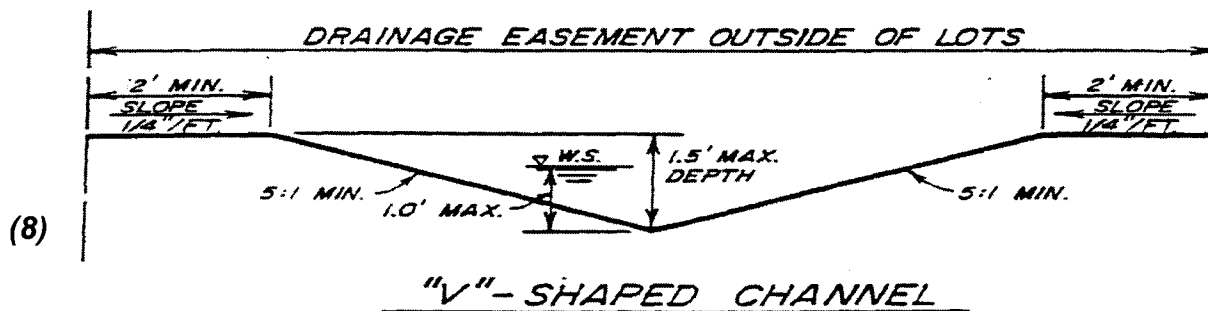
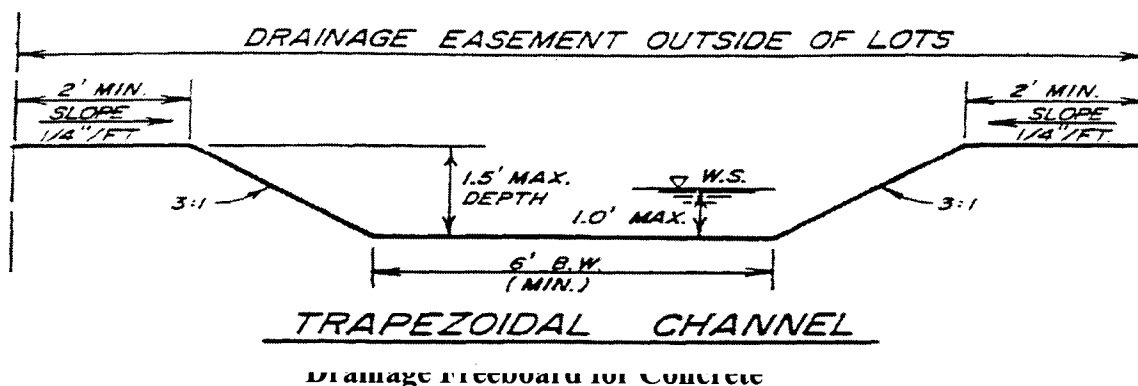
(7) Concrete lined channels.

The design of concrete lined channels shall comply with the following general requirements:

- A. Freeboard consistent with Table 504-9 will be applied to the 25-year design.
- B. From the top of the concrete lining to the top of the ditch, a side slope not steeper than three (3) horizontal to one (1) vertical shall be required; nor shall the slope be less than twelve (12) to one (1).
- C. For normal conditions, the concrete lining shall be a minimum of five (5) inches thick and reinforced with No. 3 round bars @ 12 inches on center each way. Where surcharge, nature of ground, height and steepness of slope, etc. become critical, design shall be in accordance with latest structural standards. All concrete lining shall develop a minimum compressive strength of not less than three thousand (3,000) pounds per square inch in twenty-eight (28) days. The depth of

all toe downs shall be 36 inches upstream, 24 inches downstream, and 18 inches for side slopes. The City's Construction Inspector may permit an 18" toe down in rock subgrade in lieu of the above toe down requirements. The horizontal dimensions of toe downs shall not be less than six (6) inches.

- D. Maximum concrete riprap side slopes shall be one and one-half horizontal to one vertical, unless soils tests made by a geotechnical engineer shows that a greater slope, or a special design, will be stable. Where vehicular traffic may travel within a horizontal distance equal to one-half the vertical rise of the slope, a two-foot surcharge load shall be included in the design.
- E. Fencing will be required adjacent to the channel where channel vertical wall heights exceed 2 feet. Fencing will also be required adjacent to the channel where channel side slopes exceed 2:1 and the channel depth is greater than 2 feet. The fencing must not cause sight distance problems for motorists.
- F. Vertical walls will not be permissible for depths greater than two (2) feet unless properly fenced or enclosed. Walls will have a minimum thickness of six (6) inches.



NO RETARDS
VEL. CONTROL

**STANDARDS FOR
INTERCEPTOR DRAINS
FOR INTERCEPTING SHEET FLOW
(WITHOUT ACCESS EASEMENT REQ'D)**

(Ord. No. 86711, § 22, 9-25-97)

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Figure 504-4 504-2

access to access road of the drainage right-of-way, the right-of-way shall extend

two (2) feet on one (1) side and seventeen (17) feet on the opposite side of the design limits of the channel. These seventeen (17) feet are to provide an access way along the channel with a maximum cross slope of one (1) inch per foot toward the channel. Where designed channel bottoms exceed one hundred (100) feet in width, the fifteen-foot extra width shall be provided on both sides of the channel.

- D. Interceptor drainage easements shall extend a minimum of two (2) feet on both sides of the extreme limits of the channel. Refer to Figure 504-4.
- E. Improved earthen channels will be vegetated by seeding or sodding. Eighty five percent of the channel surface area must have established vegetation before the City of San Antonio will accept the channel for maintenance.

(9) Channel bends and turns - Freeboard.

Allowance for extra freeboard shall be made when the centerline radius of the channel is less than three (3) times the bottom width. Where sharp bends or high velocities are involved, the applicant shall use the following formula for computing the extra freeboard:

$$d_2 - d_1 = V^2(T + B) \div 2gR$$

Where: d_1 = depth of flow at the inside of the bend in feet.
 d_2 = depth of flow at the outside of the bend in feet.
 B = bottom width of the channel in feet.
 V = the average approach velocity in the channel in feet per second.
 T = width of flow at the water surface in feet.
 g = 32.2 feet/second squared.
 R = the center line radius of the turn or bend in feet.

- A. The quantity $d_2 - d_1$ divided by 2 shall be added to the normal depth of flow before adding the required freeboard in calculating required right-of-way widths.
- B. Where sharp turns are used without curved sections, the depth required shall be large enough to provide for all head losses. Allowance shall be made for any backwater head that may result.
- C. For normal design conditions no extra freeboard is required. An accepted rule of thumb to follow is this: Centerline radius of channel should be at least three (3) times the bottom width.

(i) Storm Sewers

- (1) For all ordinary conditions, storm sewers shall be designed on the assumption that they will flow full under the design discharge; however, whenever the system is placed under a pressure head, or there are constrictions, turns, submerged or inadequate outfall, etc., the hydraulic and energy grade lines shall be computed and plotted in profile. In all cases adequate outfalls shall be provided and the system adequately designed.
- (2) No storm sewers shall be less than twenty-four (24) inches in diameter.

- (3) Minimum easement widths for storm sewers will be the greater of 15' or six-feet on both sides of the extreme limits of the storm sewer width (e.g. the easement width for a three barrel 10' wide box culvert with 6" walls would be $(3 \times 10') + (4 \times 0.5') + (2 \times 6') = 44'$ ($3 \times 10' + 4 \times 0.5' + 2 \times 6' = 44'$).

(j) Inlets and Openings

(1) Drop curb openings – sidewalk does not abut opening.

Where drop curb openings are used to take storm water off the Streets and into drains, the length of the curb opening can be calculated from the weir formula using the coefficient of 3.087 in the following formula:

$$L = Q \div Ch^{3/2}$$

Where: L = the length of drop curb opening required in feet.
Q = amount of flow in CFS based on 25-year design frequency.
C = 3.087.
h = head of weir in feet.

Gutter line depressions will be permitted where such depressions will not hamper the flow of traffic. For amount of curb exposure, conform to City of San Antonio Inlet Standards.

(2) Curb or Drop inlets.

Where drop inlets are use, the city standard inlets with adequate reinforcing steel may be used. All other types or designs shall be subject to the approval of the Director of Public Works. The following formulas for inlet capacity are based on drop inlets in sag points. Inlet capacities on grades will be considered less, the amount of which depends on Street grades, deflections, cross slopes, depressions, etc.

(3) Grate inlets.

The flow of water through grate openings may be treated as the flow of water through a rectangular orifice. The following formula may be used for determining grate capacity:

$$Q = CA (2gh)^{1/2}$$

Where: Q = discharge in cubic feet per second.
C = orifice coefficient of discharge (taken as 0.70).
g = acceleration due to gravity (32.2 ft./sec.²)
h = head on the grate in feet.
A = net area of the openings in the grate in square feet.

This formula gives the theoretical capacity of the grate inlet. Since grate inlets are subject to considerable clogging, capacity of the grate inlet will be taken as one-half on the value given by this formula.

(4) Curb opening inlets.

The capacity of curb opening inlets will depend on whether or not the opening is running partially full or submerged. If the depth of flow at the curb opening inlet is such as to cause a partially full opening, a weir effect will develop and the following formula will apply:

$$Q = C_w L(h)^{3/2}$$

Where: Q = the discharge of capacity in cubic feet per second.

C_w = the weir coefficient of discharge (3.087).

L = the length of curb opening in feet.

h = the head or depth of water at the opening in feet.

If the depth of flow at the curb opening is such as to fully submerge the opening, the orifice effect will develop and the formula used shall be identical to that given under grate inlets with the exception that the head, h, on the curb opening orifice shall be taken as the depth from the top of the water surface to the center of orifice or opening; one hundred (100) percent efficiency will be allowed for curb opening inlets.

* * * * *

Chapter 35, Article V, Section 35-506 is amended as follows:

35-506 *Transportation and Street Design*

* * * * *

(a) *Applicability*

(1) *Generally*

The provisions of this Division shall apply to:

- A. Any application for subdivision plat approval.
- B. Any application for Master Development Plan approval if no subdivision plat is required.
- C. Any ministerial permit where required by subsection (b), below.

(2) *Building permit requirements.*

The construction of standard curbs and sidewalks shall be a condition of the granting of a building permit in each of the following cases:

- A. A new building or structure when curbing is in place or curb lines are established for a sidewalk.
- B. The repair or improvement of an existing building or structure when curbing is in place or curb lines are established and the cost of the repair or improvement amounts to twenty-five (25) percent or more of the assessed evaluation of the building/structure as set forth by the city tax roll for the entire lot.
- C. A new or an additional driveway approach.
- D. Refer to section (q) for sidewalk standards.

In addition to the above requirement, premises used as motor vehicle service stations or parking lots require the construction of a minimum six (6) inch raised curb or other approved traffic barrier, within the lot, along the entire Street frontage except at approved driveway approaches and access walks to prevent vehicular access to the street except at designated driveway(s).

(b) Improvements Required

All street grading and base construction shall be in accordance with approved plans. Streets shall be completed consistent with the approved construction plans.

(c) Classification

(1) Conventional Classification System

Classification of an existing or proposed Street not already identified on the Major Thoroughfare Plan, for the purpose of determining the appropriate design of a roadway or development, or for the purpose of determining the appropriateness of a location for a proposed use, shall be done by the Director of Public Works. Pursuant to the Major Thoroughfare Plan, the following classification system is hereby adopted:

Table 506-1

Functional Classification System Description

Functional Class	Level of Mobility	System Access	Level of Accessibility
Freeway	Connects all urban subregions together, connects urban and rural service areas with metro major activity centers; connection to outside cities.	To other freeways, principal arterial, and selected arterial; no direct land access.	Long trips at high speed within and through the metro area; express transit trips.
Primary Arterial	Connects two or more subregions; provides secondary connections outside cities; complements freeway in high volume corridors.	To freeways, other principal arterial, and high volume collectors; no direct land access except major traffic generators.	Medium distance to long trips at high to moderate speeds within the urban area; express transit trips.
Secondary Arterial	Connects adjacent subregions and activity centers within subregions.	To freeways, principal arterial, other arterial, and collectors; restricted direct land access.	Medium to short trips at moderate to low speeds; local transit trips.
Collector	Connects neighborhoods within and between subregions.	To arterial, other collectors, and local Streets; direct land access.	Primarily serves collection and distribution function for the arterial system at low speeds; local transit trips.
Local (includes Conservation Access, Local Type A, Local Type B,)	Connects blocks within neighborhoods and specific activities within homogeneous land use areas.	To collectors and other local Streets; direct land access.	Almost exclusively collection and distribution; short trips at low speeds.

(2) Traditional Design Classification

The following classification system shall be used for designing a Traditional Neighborhood Development (TND) pursuant to §35-207 ~~35-203~~ of this Chapter:

Table 506-2

Functional Classification System Description

Functional Class	Level of Mobility	System Access	Level of Accessibility
Parkways	Parkways bring people into a neighborhood, or pass traffic through natural areas. Parkways are not designed for development. When the parkway enters the new neighborhood, it becomes a boulevard.	To parkways, boulevards, and to freeways, principal arterial, and selected arterial; no direct land access.	Long trips at moderately high speeds within and through the metro area; express transit trips.
Boulevard	Provides multi-lane access to commercial and mixed-use buildings, and carries regional traffic.	To freeways, other principal arterial, and high volume collectors; no direct land access except major traffic generators.	Medium distance to long trips at high to moderate speeds within the urban area; express transit trips.
Main Street	Provides access to, and a space for, neighborhood commercial and mixed-use buildings.	To local Streets, lanes, and other avenues or main Streets.	Medium to short trips at moderate to low speeds; local transit trips.
Avenue	Connects centers and neighborhoods. Avenues go from neighborhoods to centers, and are not long (no more than one mile). Avenues may circulate around a square or neighborhood park.	To local Streets, lanes, and other avenues or main Streets.	Primarily serves collection and distribution function for the transportation system at low speeds; local transit trips.
Local	Provides access to housing	To local Streets, alleys, and avenues or main Streets	Almost exclusively collection and distribution; short trips at low speeds.
Lanes	Provides access to single-family homes.	To local Streets, alleys, and avenues or main Streets	Almost exclusively collection and distribution; short trips at low speeds.
Alleys	Provides access to rear of property.	To local lanes and local Streets	No direct frontage. Access is from the rear of lots.
Trails	Provides non-motorized access throughout a neighborhood.	Connects homes, parks and schools, and shopping districts	No vehicular access.

Source: adapted from Local Government Commission, Street Design Guidelines for Healthy Neighborhoods (Jan. 1999)

(3) **Classification Factors**

In determining the classification of a Street, factors to be considered include the following existing or proposed features:

- A. Facility Geometrics, including the number and width of traffic lanes, turning lanes, and parking lanes.
- B. Access Conditions, including any restrictions on access, the spacing of private accesses, and average lot frontages.
- C. ~~E.~~ Traffic Characteristics, including ADT, percentage of trucks, average operating speed, percentage of turning movements, origin-destination characteristics of the traffic, and peak hour characteristics of traffic.
- D. ~~F.~~ Adjacent Land Uses.

(d) **Cross-Section and Construction Standards**

(1) **Interior Streets**

The subdivider shall dedicate all interior Streets within the subdivision based upon the following tables:

Table 506-3

Conventional Street Design Standards

Street Type	Marginal Access	Alley	Access to Conservation Subdivision	Local Type A	Local Type B	Collector	Secondary Arterial ¹	Primary Arterial ²
ROW (min.) ⁸	36'	24'	36' 34'	50'	60'	70'	86'	120'
Pavement Width ⁸	26'	18-24'	24' ⁷	28'	40'	44'	48'	72-48'
Grade (max.) ³	12%	12%	12%	12%	12%	7%	5%	5%
Grade (min.) ⁴	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
"K" Crest Curve	30	NR	30	30	30	55	70	70
"K" Sag Curve	35	NR	35	35	35	55	60	60
Centerline Radius (min.)	100'	50'	100'	100'	100'	400'	700'	1,200'
Stopping Sight Distance	75'	75'	75'	110'	150'	200'	300'	300'
Curb	No	No	No	Yes	Yes	Yes	Yes	Yes
Median	NR	NR	NR	NR	NR	NR	14' min.	14' min.
Sidewalk Width (see subsection (q)(5))	NR	No	4'/6' One Side Only	4'	4'/6'	4'/6'	4'/6'	4'/6'
Bike Facilities ⁶	NR	NR	NR	NR ^{NR}	NR	City Option ⁵	Yes Path ⁵	Yes Path ⁵
Trees	NR	No	NR	NR	NR	Yes	Yes	Yes
Planting Strips	NR	NR	NR	2' Min.	2' Min.	2' Min.	2' Min	2' Min.

Notes and Rules of Interpretation:

Table 506-3 is required for conventional option subdivisions (see § 35-202) or subdivisions not subject to Table 506-4, below), except for « Access to Conservation Subdivision », which apply only to Conservation Subdivisions (§ 35-203).

¹ For Secondary Arterial Type B right-of-ways designated on the Major Thoroughfare Plan, the required right-of-way will be a minimum of 70' with 86' at the intersections as determined by the Director of Public Works.

² For Primary Arterial Type B right-of-ways designated on the Major Thoroughfare Plan, the required right-of-way will be a minimum of 70' with 120' at the intersections as determined by the Director of Public Works.

³ See Figure 506-2 Figure 1 on section 35-506 (d) (3) Cross Section and Construction Standards.

⁴ 0.4% Optional with concrete curb and gutter.

⁵ Bike path and sidewalks can be combined. See section 35-506(d)(4) (7).

⁶ When designated on bicycle master plan as approved by City Council

⁷ Entry portion without parking

⁸ Right-of-Way and pavement widths in established neighborhoods can be waived by the Director of Public Works as required on Capital Improvement Projects.

Table 506-4
Traditional Street Design Standards

<i>Street Type</i>	<i>Trail</i>	<i>Alley</i>	<i>Lane</i>	<i>Local</i>	<i>Avenue</i>	<i>Main Street</i>	<i>Boulevard</i>	<i>Parkway</i>
ROW (min.)	14'	20'	38'	48'	82'	58'	124'	86'
Pavement Width ¹	8'-14'	10'-12'	16'-18'	22'-27'	27'-48'	28'-36'	44'-70'	44'+
Grade (max.)	10%	10%	10%	10%	7%	7%	7%	5%
Grade (min.) ⁴	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
"K" Crest Curve	NR	NR	30	30	55	55	55	70
"K" Sag Curve	NR	NR	35	35	55	55	55	60
Curb Radius	N/A	15'	15'	15'	25'	15'	25'	25'
Centerline Radius ²	95'	50'	90'	90'	250'	600'	500'	1,000'
Stopping Sight Distance	75'	75'	110	110'	150'	N/A	300'	300'
Intersection Sight Distance	15'	15'	15'	25'	75'	N/A	150'	150'
Curb	No	No	Yes	Yes	Yes	Yes	Yes	No
Median	N/A	N/A	N/A	N/A	14' in.	N/A	14' min.	14' min.
Sidewalk Width (see subsection (q)(5))	N/A	No	4'/6'	4'/6'	4'/6'	4'/6'	4'/6'	4'/6'
Bike Facilities ³	N/A	N/A	No	No	Yes Path	City Option	Yes Path	Yes Path
Trees	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Planting Strips	N/A	N/A	6'	6'	6'	City Option	6-11'	7-20'

Notes and Rules of Interpretation:

Table 506-4 applies only to the following development options: Commercial Center (§ 35-204), Commercial Retrofit (§ 35-206), Traditional Neighborhood Development (§ 35-207), and Transit-Oriented Development (§ 35-208), except as provided in footnote 5, below.

¹ See Table 506-4A below. The smaller street width with on-street parking prohibited, or the larger street width coupled with on-street parking on one or both sides of the street, may be provided if the adjoining buildings are provided with (1) an NFPA 13D fire sprinkler system in the case of Single-Family Dwelling Units, One Family Attached Dwelling Units, Two-Family (Duplex) Dwelling Units, Two-Family Attached Dwelling Units; (2) an NFPA 13R fire sprinkler system for Multi Family buildings; or (3) an NFPA 13 fire sprinkler system for Commercial Building.

² Lesser radius can be approved by the Director of Public Works.

³ Bike path and sidewalks can be combined. See section 35-506(d)(4) 35-506(7).

⁴ Optional 0.4% with concrete curb and gutter.

⁵ Any provision in Table 506-3 (entitled "conventional street design standards") notwithstanding, interior streets in a subdivision that would otherwise be required to comply with the provisions of Table 506-3 may instead comply with the provisions of Table 506-4 (entitled "traditional street design standards"), regarding pavement width requirements only, provided that the connectivity ratio (see subsection (e), below and § 35-207(g) of this Chapter) shall comply with the requirements for a Traditional Neighborhood Development. The proposed development shall comply with footnote 1 hereto. Pursuant hereto, street types in such subdivisions shall comply with Table 506-4 as follows: An Alley shall be required to meet the street width standards for an Alley as provided in Table 506-4; a Conservation Access street shall be required to meet the street width standards for a Lane; a Local Type A street shall be required to meet the street width standards for a Street; a Local Type B street shall be required to meet the street width standards for an Avenue; a Collector street shall be required to meet the street width standards for a Main Street; a Secondary Arterial shall be required to meet the street width standards for a Boulevard; and Primary Arterial shall be required to meet the street width standards for a Parkway.

Table 506-4A
Street Width options for Traditional Street Design Standards

Street Type	A	B	C	D	E	F	G	H

	Street Width	Parking	Directional	Fire Sprinklers	Alleys	Max. Block	Connections	Turning Radius
Lane	18'	None	1-Way	No	No	300'	27'	25-50'
Local	24'	1 Side	2-Way	No	Yes	- Table 515-1	NR	25-50'
Local	27'	Both Sides	2-Way	No	No	- Table 515-1	NR	25-50'
Lane	16'	None	1-Way	Yes	Yes	- Table 515-1	NR	25-50'
Lane	18'	None	2-Way	Yes	Yes	- Table 515-1	NR	25-50'
Lane	18'	1-Side	1-Way	Yes	Yes	- Table 515-1	NR	25-50'
Local	22'	None	2-Way	Yes	Yes	- Table 515-1	NR	25-50'
Local	22'	1-Side	2-Way	Yes	Yes	- Table 515-1	NR	25-50'
Local	25'	Both Sides	2-Way	Yes	Yes	- Table 515-1	NR	25-50'
Local	26'	Both Sides	2-Way	Yes	Yes	- Table 515-1	NR	25-50'

Rules of interpretation for Table 506-4A:

Column A (Street Width) refers to the width of the street from curb face to curb face.

Column B (Parking) indicates whether on-street parking is permitted, whether on both sides or only one side of the street.

Column C (Directional) refers to the directional flow of traffic.

Column D (Fire Sprinklers) refers to whether fire sprinklers are required. See footnote 1 of Table 506-4, above.

Column E (Alleys) indicates whether alleys are required. Alleys are permitted for any street classification.

Column F (Max. Block) refers to the maximum block length. Maximum block length is not subject to an administrative exception (see § 35-501(b) and 35-207(f) of this Chapter).

Column G (Connections) indicates the width of streets connecting to the street from intersection to intersection. The connecting street must be located at each end of the block. "NR" means that a connecting street of minimum width is not required.

Column H (Turning Radius) refers to the minimum inside and outside turning radii (see Figure 506-1 Turning Radius Design "Turning Radius Diagram," below).

This diagram below provides the minimum turning radius for a pumper truck. The minimum inside radius is 25' and the minimum outside radius is 50'.

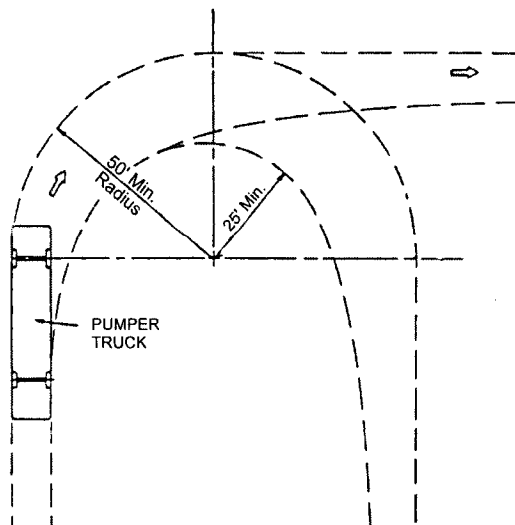


Figure 506-1 505-1

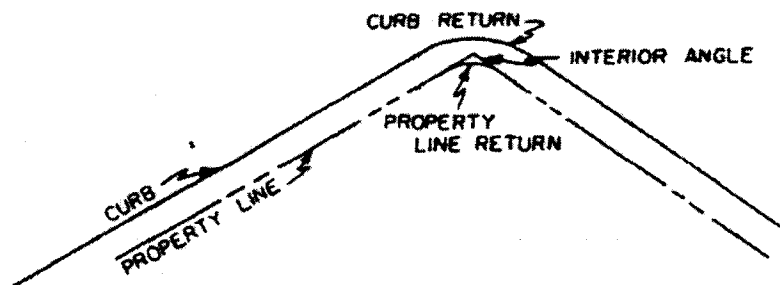
Turning Radius Design Diagram

Table 506-4B

Curb Return and Property Line Table

Minimum radii for Curb (Corner) Returns (CR) and Property Line Returns (PLR)

<i>Interior Angles in Degrees</i>	<i>Local "A" w/ Local "A"</i>		<i>Local "A" w/ Local "B"</i>		<i>Local "B" w/ Collector</i>		<i>Collector w/ Collector</i>		<i>Collector w/ Arterial</i>		<i>Arterial w/ Arterial</i>	
	CR	PLR	CR	PLR	CR	PLR	CR	PLR	CR	PLR	CR	PLR
120-105 <u>120-106</u>	15'	5'	20'	10'	25'	15'	25'	15'	25'	15'	30'	15'
105-90 <u>105-91</u>	15'	5'	20'	10'	25'	15'	25'	15'	25'	15'	35'	20'
<u>90</u>	15'	5'	20'	10'	25'	15'	25'	15'	25'	15'	50'	35'
<u>90-75</u> <u>89-76</u>	20'	10'	25'	15'	30'	20'	30'	20'	30'	20'	55'	40'
<u>75-60</u>	25'	15'	30'	20'	35'	25'	35'	25'	35'	25'	60'	45'



Notes:

- (1) Intersections with interior angles greater than 120 degrees or less than 60 degrees not permitted.
- (2) Property Line Return may be simple curve tangent to right-of-way lines or cut-off measured from PI of intersecting right-of-way lines.
- (3) Street intersections with arterial streets may require additional turn lanes and/or turning islands, resulting in CR and PLR values that would be customized for the intersection design.
- (4) Major Thoroughfare Plan streets shall intersect at continuous centerline extensions and not offset from each other.

(2) Vertical curvature

A gradual transition from one roadway grade to another shall be accomplished by means of a vertical parallel curve connecting two (2) intersecting tangents. No vertical curve for gradients having an algebraic difference of 1.5 or less will be required. The minimum length of vertical curve shall be computed from the following formula and table:

$$L = KA$$

Where: L = the length of vertical curve in feet
K = a constant related to sight distance and geometry of a parabolic curve (see Tables 506-3 and 506-4)
A = the algebraic difference in grades in percent

(3) Grade

- A. Street and alley grades shall conform to the terrain and shall not exceed the values prescribed in Tables 506-3 and 506-4, above. No Street or alley grade shall be less than five-tenths of one percent (0.005) or four-tenths of one percent (0.004) if concrete curb and gutter is provided, unless otherwise specified by the Director of Public Works. The minimum cross-slope of a road shall be 2% and the maximum shall be 4%.
- B. Grades between 12% and 15% can be negotiated by the fire equipment depending upon the length of such grades, and the approach conditions below these grades. The restrictions on using grades between 12% and 15% are contained in Figure 506-2.
- C. The Design Engineer should also note that the maximum grades may also be restricted by drainage considerations. Streets used as drains have maximum flow velocities assigned to control erosion of the pavement (see Table 504-6 ~~table 35-504-16~~).

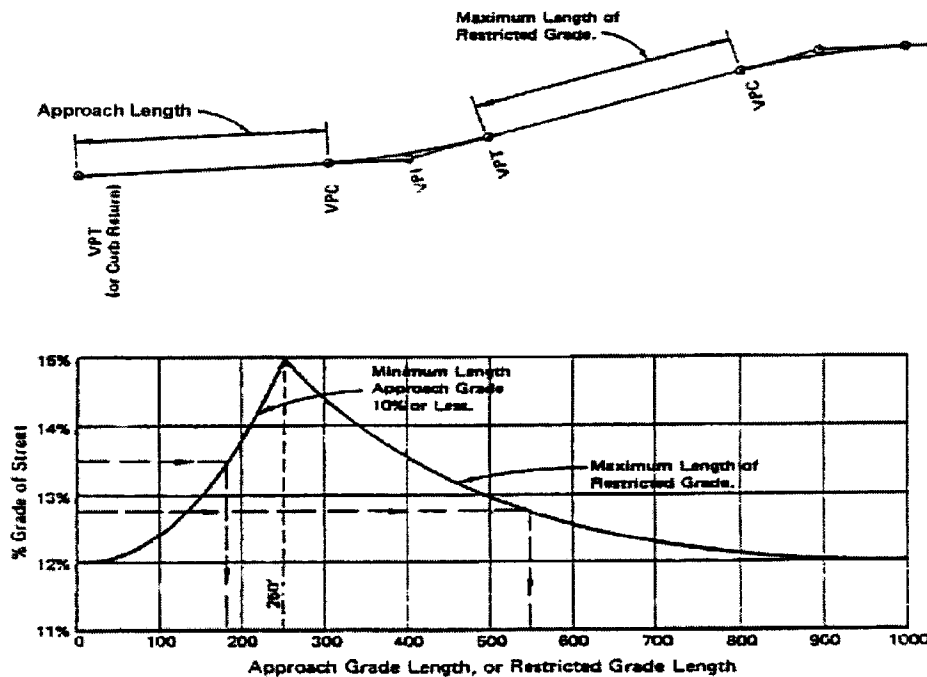


Figure 506-2

(4) **Bicycle Facilities**

When identified on the City Council approved Bike Facilities Master Plan the following will apply. Required Collector/Main Streets will include bike lanes or bike paths. Bicycle facilities along Arterial / Avenue / Boulevard / Parkway Streets shall be located separate from the pavement section. The bicycle facility, at least 5 feet in width and constructed of an all weather surface on one side of the street, shall be provided between the curb and the right-of-way line or the sidewalks can be constructed at least 8-foot in width on one side of the street to accommodate both pedestrian and bicycle traffic. If separate bicycle facilities cannot be provided, such as along existing collector and arterial streets of sufficient width, bicycle lanes, located within the

pavement section, shall be a minimum of 5 feet wide (excluding curb and drain inlets), and shall be signed, striped and marked for bicycle use. Bike paths, when required within the city limits, may be constructed with development of the abutting property at the time building permit acquired.

(5) Intersection Sight Distance

To ensure safety of motorists and other travelers, it is necessary that drivers who are entering an intersection have an adequate view of approaching motorists. This view is required over a clear vision area, which is a right triangle where one side is called "intersection sight distance" and the adjacent side is the distance between the driver and the path of the vehicles approaching from the side. The clear vision area is that portion of a property over which motorists must see to safely judge and execute a driving maneuver into the intersection and onto the street. This applies to intersections of two or more streets as well as junctions of driveways and streets. Clear vision areas must be free of visual obstructions, e.g. structures, walls, fences, and vegetation, which are higher than three feet and lower than eight feet above the pavement. The American Association of State Highway & Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets 1990 AASHTO Green Book, or latest revision thereof determines this length of the required intersection sight distance.

(6) Cul-de-sac Streets

The following criteria shall be used for cul-de-sac street design and fire hydrant layout:

- A. For Cul-de-sac streets less than or equal to 100 feet to 500 feet in total length, the following is required:
 - 1. Turnaround right-of-way shall be not less than one hundred (100) feet in diameter in residential areas and not less than one hundred fifty (150) feet in diameter in commercial and industrial areas.
 - 2. Turnaround shall include at least twenty-five (25) feet of paved driving surface with a minimum exterior radius of forty (40) feet for residential areas and sixty (60) feet for commercial and industrial areas.
 - 3. The interior of the turnaround may be landscaped or paved. A maximum radius of fifteen (15) feet will be allowed for landscaping purposes.
- B. For Cul-de-sac streets in residential subdivisions greater than 500 feet and less than or equal to 1000 feet in total length, the following is required:
 - 1. Pavement width for the entire length of the Cul-de-sac street shall be a minimum of 30 feet, regardless of the type of residential subdivision.
 - 2. Turnaround right-of-way shall be not less than one hundred twenty (120) feet in diameter.
 - 3. Turnaround roadway shall have a minimum exterior radius of fifty (50) feet. The entire interior of the turnaround must be paved with no island.

- C. In the C, RE, and R-20, zoning districts Cul-de-sac streets over one thousand (1000) feet in length may be permitted subject to approval by the Director of Public Works after consultation with the Fire Chief or his designee. No such approval shall be granted unless the Director of Public Works finds the following:
1. The Cul-de-sac length, layout and topography will not impede safe access and egress by emergency vehicles including fire trucks and emergency medical services
 2. A longer Cul-de-sac street is needed because of unique topographical conditions such as steep slopes, wetlands, streams, or similar conditions and an alternative design would not more effectively accommodate said conditions.
- D. Fire Hydrant installation. Fire hydrants located in Cul-de-sacs within residential subdivisions shall be located within 500 feet of every building site. In every case a fire hydrant shall be installed on the Cul-de-sac, not more than twenty (20) feet and not less than ten (10) feet from the intersecting street. For Cul-de-sac distances greater than 500 feet but less than or equal to 700 feet, a minimum of two fire hydrants shall be installed. One fire hydrant shall be installed on the Cul-de-sac, not more than twenty (20) feet and not less than ten (10) feet from the intersecting street, and the other at the mouth of the Cul-de-sac not more than ten (10) feet before the beginning of the turnaround. For Cul-de-sac distances greater than 700 feet but less than or equal to 1000 feet, a minimum of three fire hydrants shall be installed. One fire hydrant shall be installed on the Cul-de-sac, not more than twenty (20) feet and not less than ten (10) feet from the intersecting street. A second fire hydrant shall be placed at the mouth of the Cul-de-sac not more than ten (10) feet before the beginning of the turnaround. The third fire hydrant shall be installed as close as possible at the midpoint between the other two. Refer to the figure 506-3 below regarding fire hydrant locations on Cul-de-sacs.

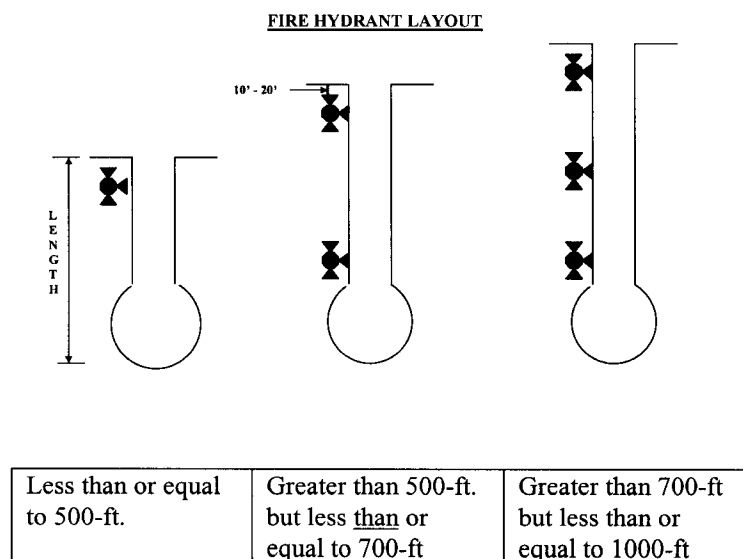


Figure 506-3

(7) Alleys

Alleys are optional unless it is required by table 506-4A.

(8) Intersection with Alleys and Utility Easements

Where two (2) alleys or utility easements intersect or turn at a right angle, a cutoff of not less than ten (10) feet from the normal intersection of the property or easement line shall be provided along each property or easement line. If the alleys are not straight within each block or if they do not connect on a straight course with the alleys of adjoining blocks, then an easement shall be provided for the placing of guy wires on lot division lines in order to support poles set on curving or deviating rights-of-way or alleys.

(9) Substandard existing Streets

Where subdivisions are adjacent to existing Streets and right-of-way widths of those existing Streets are less than the minimum right-of-way widths as set out in this chapter for all Streets, no building permits shall be granted until the right-of-way widths have been dedicated to the minimum widths required by this Chapter abutting the development. The provisions of this subsection shall not apply within the Infill Development Zone ("IDZ"). Curb, sidewalk, and pavement improvements adjacent to the development for multi-family and commercial developments shall be provided on sub-standard width existing streets at the time of building permit. .

(10) Curbs and Pavement

Curbs shall be required on both sides of all interior Streets. Curbs and pavement are required on the development side of all adjacent Streets except:

- A. When the Director of Public Works determines that the curbs will interfere with or disrupt drainage.
- B. When the Director of Public Works determines that public construction ~~that~~ ^{which} would require curbs replacement will take place on the Street within three (3) years.
- C. On local type A Streets in single- or two-family residential subdivisions within the RP and RE zoning districts.
- D. On Streets in residential subdivisions where no adjacent lots are platted if approved by the Director of Public Works, such as Streets adjacent to walls or drainage ways.
- E. Where the Director of Public Works determines that preservation of trees warrants the elimination, reduction in width, or modification to the curb requirements in accordance with the Tree Preservation Standards.

(e) Connectivity

* * * * *

(1) Connectivity Index for Internal Streets

The Streets within any proposed subdivision shall provide a Connectivity Ratio of not less than 1.20. The Connectivity Ratio shall be computed by dividing the number of Street Links by the number of Nodes within the Subdivision. For purposes of this Subsection, the intersection of a local Street within the proposed subdivision with an arterial or collector street providing access to a proposed subdivision shall not be considered a node in computing the connectivity ratio. The connectivity index will not apply to subdivisions with less than 125 single family lots.

(2) *Projecting Streets*

Where adjoining areas are not subdivided, the arrangement of Streets in the subdivision shall make provision for the projection of Streets into such unsubdivided areas. Parcels shall be arranged to allow the opening of future Streets and logical further subdivision. Where necessary to the neighborhood pattern, existing Streets in adjoining areas shall be continued and shall be at least as wide as such existing Streets and in alignment therewith. Where Streets change design in alignment and width, the Applicant shall provide transition sufficient to ensure safe and efficient traffic flow. This section is not intended to require Local designated streets to project into floodplains, bluffs or other natural features or existing development that has not made accommodations for connection.

(3) *Reserve Strips Prohibited*

There shall be no reserve strips controlling access to land dedicated or intended to be dedicated to public use. The Applicant shall ensure that there are no reserve strips controlling access to land dedicated or intended to be dedicated to public use.

(4) *Half-Streets.*

In the case of collector, local, or marginal access Streets, no new half-Street right-of-ways shall be platted. Where the proposed subdivision abuts upon an existing half-Street, the other half of the Street shall be platted.

(5) *Dead-end Streets.*

Dead-end Streets shall be prohibited except as short stubs to permit future expansion. A "short stub" is defined as being the average depth of the adjacent lot within the subdivision.

(6) *Nonaccess easement.*

When deemed necessary, and when the connectivity index required above would not be reduced, a vehicular nonaccess easement may be required on a lot(s) for the purpose of controlling ingress and egress to vehicular traffic.

(7) *Secondary Access.*

At least one access point into a single-family residential subdivision shall be provided for every 2,640 feet (1/2 mile) of frontage. Where a single family residential subdivision exceeds one-hundred twenty five (125) units, a secondary access will be required.

(f) *Street intersections.*

Streets shall intersect at an angle of not less than ~~sixty (60)~~ ~~seventy-five (75)~~ or more than one-hundred ~~twenty ten (120)~~ ~~(110)~~ degrees. The centerline offset of intersections shall be at least one hundred seventy-five (175) feet.

(g) Dedication of Arterial

(1) Adjacent streets.

The subdivider shall dedicate right-of-way width and provide pavement width in accordance with the following table and typical sections in subsection (d) of this Section.

Table-506-5

Street Type	Right-of Way Width	Pavement Width
Primary arterial	60 ft.	24 ft. with curbs
Secondary arterial	43 ft.	24 ft. with curbs

(2) All existing streets.

Where subdivisions are adjacent to existing arterial streets and right-of-way widths of those existing arterial streets are less than the minimum right-of-way widths as set out in this chapter for all streets, the subdivider shall be required to dedicate on the plat one-half (1/2) of the right-of-way width required adjacent to the land being platted to bring the existing arterial streets to the right-of-way widths in accordance with the Major Thoroughfare Plan.

(3) Additional right-of way.

Additional right-of-way beyond that specified by the major thoroughfare plan may be required for major thoroughfares and/or their intersections in order to meet Texas Department of Transportation (TX DOT) requirements. The total right-of-way will generally not exceed one hundred twenty (120) feet. Where TXDOT has plans to acquire right-of-way within 5 years, a right-of-way reservation or a building setback line shall be established to preclude the construction of significant improvements that would ultimately be removed in conjunction with future highway widening.

(h) Street Names & Signage.

(1) Generally

Names of new Streets shall not duplicate, or cause confusion with the names of existing Streets, unless the new Street is a continuation of, or in alignment with, an existing Street. All new Street names shall be submitted to and approved by the United States Postal Service.

(2) Within City Limits

Within the incorporated areas of the City, Street name signs shall be installed at all intersections within and abutting the subdivision. Such signs shall be manufactured and installed by the subdivider in accordance to specifications of, and subject to plan reviews and inspections, by the city department of public works. Street name signs shall not be accepted by the city until the

Street has been accepted for maintenance by the city, unless approved by the Director of Public Works in order to provide mail service.

(3) ETJ

Within the city's extraterritorial jurisdiction, Street name signs shall be installed at all intersections within and abutting the subdivision. Such signs shall be manufactured and installed by the subdivider in accordance to specifications of, and subject to plan reviews and inspections by the city department of public works.

(4) Warning and Regulatory Traffic Signs.

Within the city limits, regulatory and warning traffic signs shall be installed within and abutting the subdivision in accordance with the *Texas Manual on Uniform Traffic Control Devices (TMUTCD)*, as required by the City's Department of Public Works. Such signs shall be manufactured and installed by the subdivider in accordance to specifications of, and subject to plan reviews and inspections by, City's Department of Public Works. Warning and regulatory signs shall not be accepted by the City until the Street has been accepted for maintenance by the City.

(i) Street lights.

- (1) Streetlights shall be provided in all subdivisions within the city. Street lights shall be installed by city public service at all public Street intersections with other public Streets, crosswalks, at safety lane intersections with public Streets, midblock areas, or service areas as determined by city policies.
- (2) In subdivisions within the RP or RE zoning districts, or in the ETJ and proposing densities which do not exceed one (1) dwelling unit per acre, the Director of Public Works may waive the requirement for street lights for public street intersections or midblock areas where he finds that the area does not require such lighting for safe pedestrian or vehicular traffic.
- (3) The subdivider shall contract with the city through the department of public works for payment of all costs associated with the engineering and installation of Street lighting. Such contracts must be executed prior to issuance of a letter of certification by the department of public works. Full payment for all costs must be made prior to the recordation of the plat. A copy of the current schedule of costs to the city of labor and materials associated with the engineering and installation of street lighting shall be filed by the Director of Public Works with the city clerk and be available for public inspection. New schedules shall be filed whenever there is an increase in costs.

(j) Private Streets.

(1) Applicability

Private Streets are permitted within Planned Unit Developments, the Business Park (BP) zoning district, and manufactured home/recreational vehicle parks.

(2) Design Standards

The design standards and construction specifications of private Streets shall be the same as for public Streets except as noted below.

- A. A right-of-way of fifty (50) feet for local type A streets and sixty (60) feet for local type B streets shall not be required.
- B. The paved street width, exclusive of curb exposures, shall be a minimum of twenty-seven (27) feet for local type A streets and thirty (30) feet for local type B streets.

(3) Certification

Upon completion of construction, the Director of Public Works shall be provided with written a certification signed by a licensed professional engineer certifying that the private Streets and sidewalks (as applicable) were designed and installed as required by the provisions of this Chapter.

(4) Maintenance

Private Streets and sidewalks shall be owned and maintained by a corporation, community association, or other legal entity established for this purpose.

(5) Converting Private Streets into Public Streets

Homeowners Association (HOA) requesting the City to accept private street(s) into the City's street network shall follow this process.

The HOA at their expense must provide an Engineering Report to Public Works Department for review. The Engineering Report shall include.

- A. Request from HOA that the City can accept the private street(s).
- B. Document indicating 100% owner's participation.
- C. Subdivision Plat
- D. Subdivision Construction Plans to include plan and profile
- E. Certification Letter from the Project Engineer certifying the construction of the subdivision was done in accordance with the Public Works Specifications.
- F. Photos showing the conditions of the existing roadway and right-of-way through out the subdivision.
- G. Pavement Condition Index (PCI)
- H. Site Plan showing location of streetlights and traffic control devices (if applicable).

The Engineering Report must be completed before Public Works Department proceeds with the following procedures:

- A. Public Works Department receives the Engineering Report and distributes it to appropriate ~~appropriate~~ City Departments.
- B. If the City Attorney's Office determines 100% of the legal property owners are represented as supporters of the request, this information is forwarded to the Street Maintenance Division Manager. If support for the ownership transfer is

less than 100%, this information is submitted to the Public Works Department who will notify the applicant of the denial of the request.

- C. The Street Maintenance Division Manager will evaluate the PCI Street Surface Condition and Appurtenances Information. If the print out scores indicate low score, then the Street Maintenance Division Manager will submit the information to the Public Works Department who will notify the applicant of the denial of the request.
- D. If the City Engineer determines that the street does meet the minimum requirements, then the recommendation is submitted to the Public Works Director. The Public Works Director will determine whether it is in the interest of the City to accept the street for ownership and maintenance and subsequently notifies the applicant of the decision.
- E. Process for removal of Control Access Facilities (gates, rails, house, etc.)

(k) *Traffic signals.*

- (1) Where a proposed Street, or driveway, intersects a public Street at an existing traffic signal, the traffic signal shall be upgraded to accommodate the added traffic approach at the expense of the developer or subdivider. The design and construction of this partial signal installation shall comply with the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and City of San Antonio specifications and design requirements.
- (2) Where a proposed intersection involves an existing or proposed arterial Street, and the intersection could reasonably be expected to warrant a traffic signal within approximately five (5) years, the subdivider shall install that portion of the traffic signal infrastructure that is underground on the proposed Street. The design and construction of this partial signal installation shall comply with the TMUTCD and the City of San Antonio specifications and design requirements.

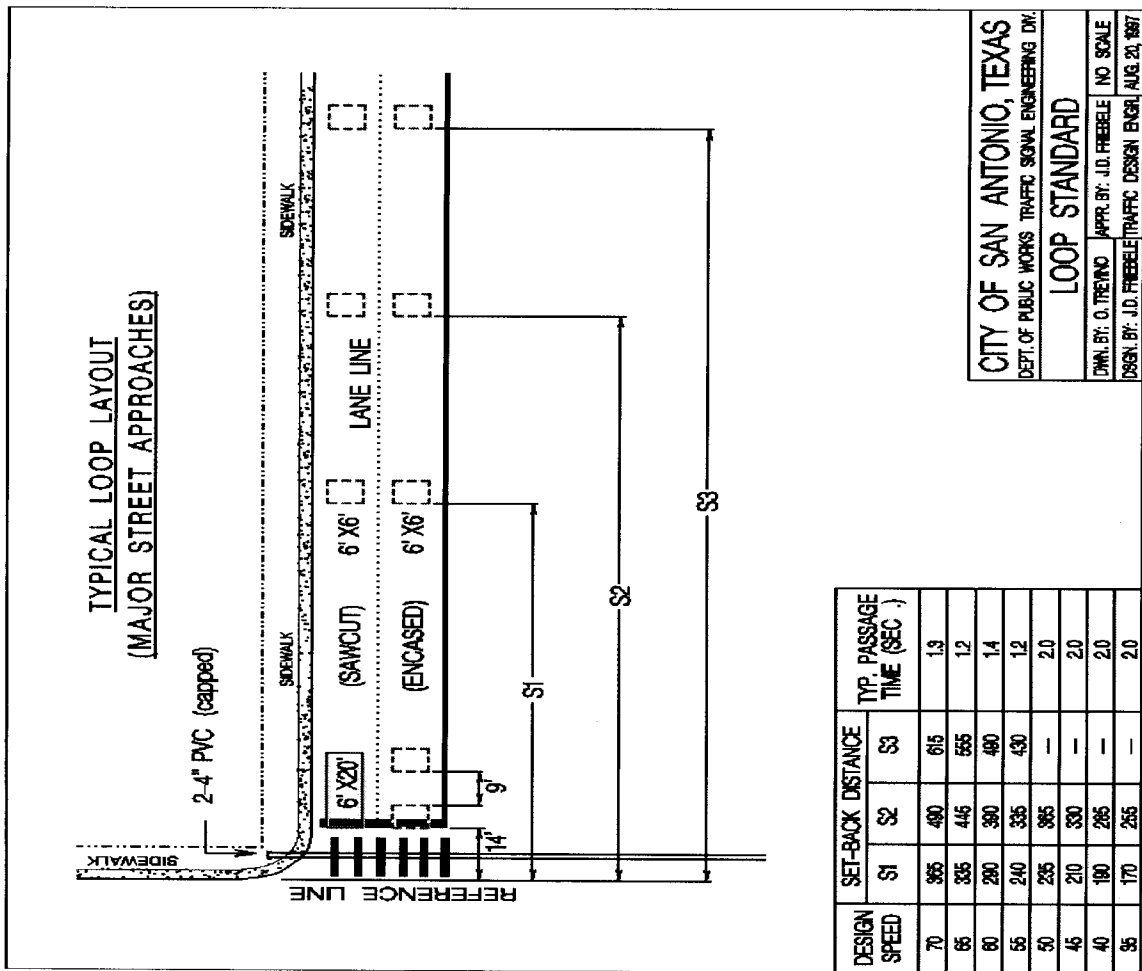
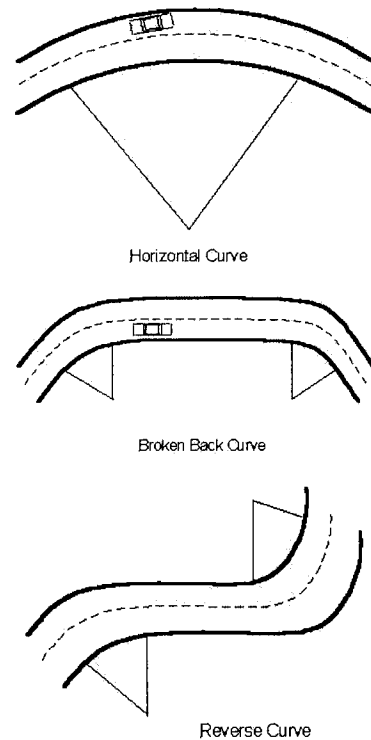


Figure 506-3

(l) **Horizontal curvature.**

(1) **Conventional Design**

Horizontal centerline curvature shall be provided by simple circular curves with a constant radius for the safety and comfort of motorists. The minimum and maximum radii designated in this section, Tables 506-3, 506-4, 506-4A, 506-4B, and Figure 506-1 ~~506-1 and 506-2~~, shall be used in designating horizontal curves. "Broken-back", compound curves, reverse curves shall not be permitted. A minimum fifty (50) foot feet tangent length is required between curves on local A and B streets. A minimum ~~of~~ one-hundred (100) foot feet tangent length is required between curves on collector and arterial streets. Super elevation may be used on arterial ~~arterials~~ Streets with the approval of the Director of Public Works.



(2) **Combination of curves.**

A combination of horizontal and vertical curves shall be permitted provided sufficient sight distance is available for safe operation in accordance with the requirement of Subsection (d) of this Section.

(3) **"Elbow" Configurations**

An alternative design required by Subsection (d) of this Section may be used in lieu of the centerline radius prescribed by subsection (d) of this Section. The point of radius may be relocated along the lines indicated by letters on the figure below (lines AX, AY and AZ). The point of radius shall not exceed fifteen (15) feet from point A. The point of radius shall be shown on the plat. The point of radius may be shifted along the Street centerline (lines AX and AZ) see figure 506-6.

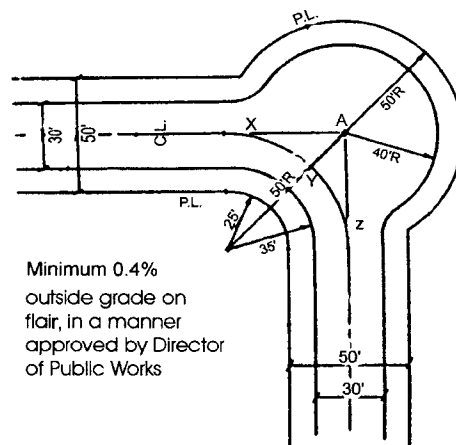


Figure 506-6 ~~506-4~~

(m) **Pavement and median transition.**

Where cross section changes occur, appropriate pavement transition shall be provided. Transition shall be described as a ratio of lateral transition width to transition length in feet. The following formulas shall be used in computing appropriate transition:

(1) Local Street to Local Street, Local Street to Collector, Collector to Collector.

$$L = 20W$$

Where:

L = Transition length in feet measured along the center line of the Street.

W = Transition width measured as the difference in pavement width from the center line to the pavement edge of the two (2) cross sections.

(2) Arterial Streets except freeways.

$$L = DW$$

Where:

L = Transition length in feet measured along the center line of the Street.

D = Design speed of 60 miles per hour. ~~the particular Street section as determined by Subsection (d) of this Section.~~

W = Transition width measured as the difference in pavement width from the center line to the pavement edge of the two (2) cross sections.

(3) Median or Center Dividers

Median or center dividers will also be transitioned. Median transition shall generally parallel the pavement transition to a point where the median width is four (4) feet at which point the median shall be rounded off with a two-foot radius. Median or divider transition shall be designed so that abrupt offsets are not created at intersections.

(n) Medians

(1) Openings.

Medians shall be continuous. Openings in the median may be provided for public Streets or driveways provided the centerline spacing between median openings is at least four hundred (400) feet. When medians are open, left turn bays and median radii shall be provided and curbed. Existing medians shall be modified to conform to these requirements where necessitated by the traffic generated by the Proposed Development, as set forth in the Traffic Impact Analysis (see 35-502(l)(1) of this Chapter). Where existing streets are improved, dual left turn lanes can be approved if supported by a TIA (see 35-502).

(2) Special purpose medians.

Dividers constructed for aesthetic purposes as entrances for subdivisions or landscaping shall be permitted. The minimum width for such dividers is fourteen (14) feet with minimum eighteen (18) feet of pavement width on either side of the median. The divider shall maintain the full width for a minimum twenty-five (25) feet after which an appropriate transition shall be provided

in accordance with standards for pavement and median transition (Subsection (m), above). The twenty-five (25) feet shall be measured from the edge of pavement of the ultimate width of the intersecting roadway. The nose or rounded portion of the divider shall be placed two (2) feet off the edge of the traveled roadway of the intersecting street unless the turning radius of vehicular traffic indicates other modifications to the median nose are required. No signs, walls or fences, trees, shrubs or other ground cover shall be placed in the median which will obstruct the driver's sight distance (See Figure 506-7). The median design and exceptions to pavement width adjacent to median must be approved by the Director of Public Works.

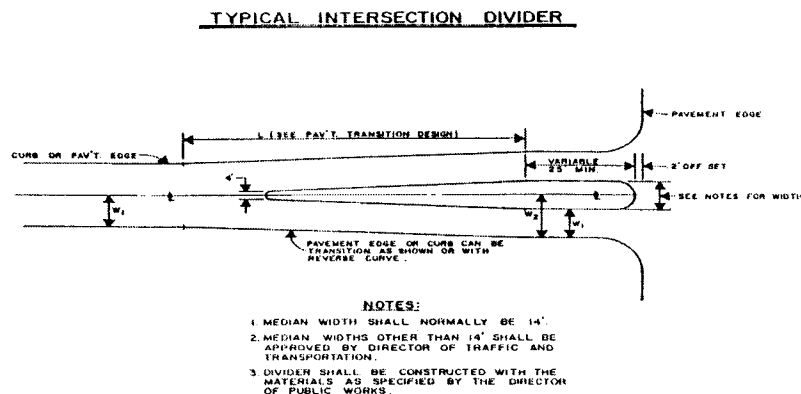


Figure 506-7 Figure 506-5

Landscaping shall be in accordance with current Landscaping Standards (§ 35-511) design standards of the director of parks and recreation. In addition appropriate maintenance agreements shall be made with the director of parks and recreation.

(3) Sidewalk Crossings

Where a median or traffic divider projects across sidewalks, the median (concrete or sod) shall be opened for five (5) feet at the projection of the crosswalk. This five (5) foot opening shall be paved to the grade of the existing surface to permit wheelchair and mobility impaired persons to utilize the crosswalk.

(o) Wheelchair ramps

(1) Location

Wheelchair ramps shall be constructed at the entrance to all crosswalks where sidewalks exist or where required as part of these regulations. A waiver of sidewalk requirements does not waive the wheelchair requirement. Where sidewalks or curbs exist, wheelchair ramps shall be added at locations specified herein, wherever any work is proposed to the existing driveways, curb, or sidewalks. Also, wheelchair ramps shall be added wherever missing sidewalks or curb segments are added in front of any lot or block of a subdivision.

(2) Design Standards

Any construction, reconstruction or other improvements addressed in this chapter shall conform as a minimum to the Americans with Disabilities Act and any rules and regulations relating thereto (see § 35-501(d)). The Plat or Site Plan shall show infrastructure construction, reconstruction, repair or regrading and details of curb cut and wheelchair ramps. The location of the curb-cut opening and ramp must be coordinated with respect to the pedestrian crosswalk lines. This planning must ensure that the ramp openings at a fully depressed curb shall be situated within the parallel boundaries of the crosswalk markings. Ramps for persons with disabilities ~~the disabilitydisabled~~ are not limited to intersections and marked crosswalks, and ramps shall also be provided at other appropriate or designated points where there is a concentration of pedestrian traffic, such as loading islands, midblock pedestrian crossings, and locations where pedestrians could not otherwise recognize the proper place to cross the street. Because non-intersection pedestrian crossings are generally unexpected by the motorist, warning signs shall be installed and parking shall be prohibited. Ramps for persons with disabilities ~~the disabilitydisabled~~ shall have a textured nonskid surface for the user which also warns a sight-impaired person of the presence of the ramp. Wheelchair ramps shall be designed and constructed in accordance with the details in Figure 506-8, below.



(p) Pavement Standards.

(1) Pavement structure

The design of pavement structures shall be in accordance with the American Association of State Highway and Transportation Officials (AASHTO) Guide for Design of Pavement Structures, 1993 or latest approved edition. The pavement design report shall be prepared and signed by, or under the supervision of, a professional engineer registered in the State of Texas. The following design requirements shall be used for pavement design:

(2) Length of service life

Pavement shall be designed for a twenty-year service life.

(3) Traffic Load, Reliability and Pavement Structures

The traffic load is the cumulative expected 18-Kip equivalent single axle loads (ESAL) for the service life. The following 18-Kip ESAL Reliability Level and Pavement Structure shall be used in the design of streets for each street classification:

**Table 506-6
Pavement Specifications**

Street Classification	18-KIP ESAL	Reliability Level	Minimum Pavement Structure	Maximum Pavement Structure
Primary and Secondary Arterials	3,000,000	R-95	SN = 3.80	SN = 5.76
Collector and Local Type B Streets	2,000,000	R-90	SN = 2.92	SN = 5.08
Local Type A Street with bus traffic	1,000,000	R-70	SN = 2.58	SN = 4.20
Local Type A Street without bus traffic	100,000	R-70	SN = 2.02	SN = 3.18

Traffic loads for primary and secondary arterial, collector and local type B Streets shall include bus traffic.

(4) Serviceability

The serviceability of a pavement is defined as the pavement's ride quality and its ability to serve the type of traffic (automobiles and trucks) which uses the facility. The initial serviceability index (p₀) for flexible pavements shall be 4.2 and for rigid pavement shall be 4.5. The minimum terminal serviceability index (P_t) for local Streets shall be 2.0 and for collectors and arterials shall be 2.5. A standard deviation (S₀) for flexible pavement shall be 0.45 and for rigid pavement shall be 0.35.

(5) Roadbed soil

A soil investigation must be performed for the design of pavement structures. The number of borings and locations shall be sufficient to accurately determine the stratum along the route. Any existing soil information that is available either from the city or from private sources will be evaluated and, if determined to be applicable and valid, will be allowed in place of new soil tests.

Roadbed soil having a plasticity index (P.I.) greater than twenty (20) shall be treated with lime to reduce the P.I. below twenty (20). Application rate of lime shall be determined based on laboratory testing. In no case shall the lime be less than fifteen (15) pounds/S.Y. for six (6) inches of lime treated subgrade. Lime treated subgrade will be included as a "structural layer" within the pavement design calculations. Proposals for stabilization alternatives in place of the use of lime will be considered upon submittal of an engineering report verifying adequate stabilization of the highly plastic soil.

Where the roadbed is in a rock excavation a "Structural Layer" within the pavement design calculations can be used that is equivalent to a structural layer for Lime Stabilized Subgrade. If a

roadbed Structural Layer is used in the pavement calculation for rock subgrade an Engineering Report will be provided to Public Works addressing the consistency of the subgrade prior to base placement.

(6) *Pavement layer material*

Alternative pavement materials may be used where the existing soil or subsurface conditions, or the alternative materials, provide a level of driveability comparable to the materials otherwise required by this Section. Proposals for alternative pavement materials with supporting engineering documentation may be submitted to the city for consideration for use. The combination of the following materials will be allowed for pavement structure:

- A. Lime treatment for subgrade.
- B. Flexible base.
- C. Prime coat.
- D. Tack coat.
- E. Hot mix asphaltic concrete pavement.
- F. Asphalt treated base.
- G. Reinforced concrete.
- H. Base reinforcement (Geogrids).

The Director of Public Works in accordance with the standards provided herein must approve the pavement combination.

(7) *Minimum layer thickness (compacted)*

If the following components are utilized in proposed pavement sections, the minimum thickness for the components shall be:

- A. Hot mix asphaltic concrete pavement shall not be less than one and one-half (1 1/2) inches thick for surface course (Type D).
- B. Hot mix asphaltic concrete pavement shall not be less than two and one-half (2 1/2) inches thick for a leveling-up course (Type B).
- C. Asphalt treated base shall not be less than four (4) inches thick.
- D. Flexible base shall not be less than six (6) inches thick.
- E. Lime treatment for subgrade shall not be less than six (6) inches thick.

(8) *Curb and gutter*

Concrete curbs or monolithic curbs and gutters constructed in accordance with the details shown on Figure 506-9 shall be provided where indicated on the typical cross sections provided in Subsection (d) of this Section.

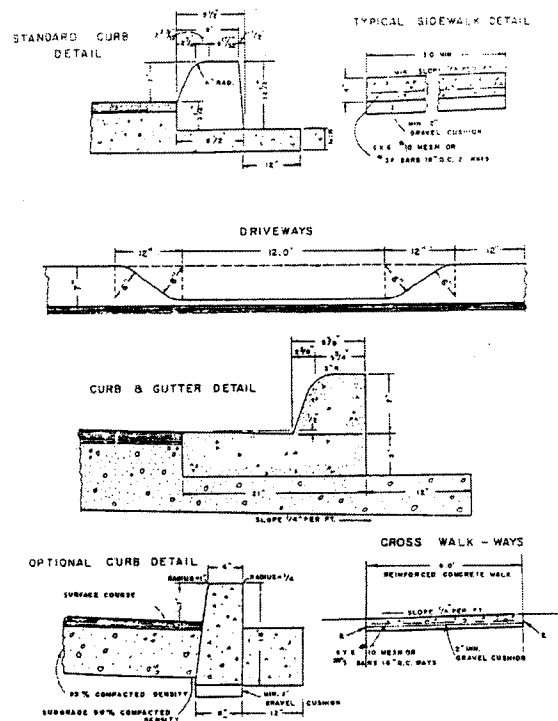


Figure 506-9 506-7

(9) Medians and dividers

Medians and dividers having curbs shall be constructed in accordance with the approved cross section. Where divider strips on primary and secondary Streets are constructed without curbs, they shall be graded to a slope of one-quarter (0.25) inch per foot from the center of the divider strip to a point seven (7) inches from above the edge of pavement and from that point to the edge of pavement.

(10) Parkways.

Parkway slopes shall be one-quarter (0.25) inch per foot toward the Street except in heavy cuts, where a maximum of one (1) inch per foot shall be permitted. Landscaping, walls or fences placed in the parkway for aesthetic purposes shall not obstruct sight distance.

(q) Sidewalk Standards

(1) Applicability

Sidewalks shall be required on both sides of all internal Streets and the subdivision side of all adjacent or perimeter Streets except as specified in Subsection (2), below. Reverse residential

Street lots shall have sidewalks provided on both Street frontages. Sidewalks shall be required as part of the street improvements only on one (1) side of subdivision entry streets unless residential lots are platted or planned to be platted on both sides of the street.

(2) Sidewalk exceptions.

Sidewalks shall not be required in the following situations:

- A. When a pedestrian circulation plan accompanied by the plan review fee specified in Appendix C has been submitted to and approved by the planning commission prior to or at the time of plat approval. The pedestrian circulation plan shall show the location and arrangement of all-weather walkways and the phasing or time schedule for the construction of the walkways. In considering the plan, the planning commission shall require and may impose conditions to ensure that access to and along the walkway areas is safe, convenient, and provides pedestrians with adequate paths of movement. If the proposed walkways are not located within a public right-of-way, then pedestrian easements shall be included on the plat.
- B. When the Director of Public Works determines that the sidewalks will interfere with or disrupt drainage.
- C. When the Director of Public Works determines that public construction which would require sidewalk replacement will take place on the Street within three (3) years.
- D. On local type A Streets in single- or two-family residential subdivisions with a density less than 2.5 residential units per acre.
- E. On Streets in residential subdivisions where no adjacent lots are platted if approved by the Director of Public Works, such as Streets adjacent to walls or drainage ways.
- F. Where the Director of Public Works determines that preservation of trees warrants the elimination, reduction in width, or modification to the sidewalk and curb requirements in accordance with the Tree Preservation Standards.

(3) Planting Strips

Sidewalks shall be defined by placing a planted strip of not less than two (2) feet minimum between the back of the curb (BOC) and the street edge of the sidewalk. Street trees may be located in the planting strip if trees are a minimum of three (3) feet from the curb.

(4) Performance Agreement and Time of Construction

Sidewalks shall be included as part of the Performance Agreement required by Appendix 35-438 of this Chapter with exception to sidewalks along street frontage of lots within the city limits for which building permits will be required. All sidewalks within a subdivision must be completed when ninety-five (95) percent of the lots within the subdivision are built out, excluding lots for which a building permit is pending.

(5) Width

Except as otherwise specified in Americans with Disabilities Act (ADA) (see § 35-501(e) herein), sidewalks shall have a minimum unobstructed width as follows:

- A. The minimum width of sidewalks adjoining a planting strip shall be four (4) feet in width. The minimum width of sidewalks adjoining the curb shall be six (6) feet in width for Collectors and Arterials and four (4) feet for Residential.
- B. The minimum width of sidewalks located within the boundaries of the "D" Downtown District shall be not less than six (6) feet.

(6) Location

All sidewalk construction shall conform to the latest criteria of the Americans with Disabilities Act (ADA) (see § 35-501(e) herein). Changes in the sidewalk location for a maximum linear distance of two hundred (200) feet are permitted to be approved by the field inspector without amending the Street plan or utility layout provided such plans are annotated with a note stating that intent. During the plat review process, reviewing agencies may designate areas where prior approval of the agency is necessary for any alteration to the sidewalk location. No other changes shall be allowed without the approval of all agencies that ~~which~~ approved the original utility layout.

(7) Continuity

Sidewalks shall not be installed in such a manner that they conflict with or are obstructed by power lines, telephone poles, fire hydrants, traffic/Street signs, mail boxes, trees, buildings, barriers, light poles, or any other structure. The grades of sidewalks shall be such that changes of grades greater than ten percent (10%) are not encountered within blocks. When there is an existing or anticipated obstruction, the sidewalk shall be installed around the object and shall provide the required sidewalk width. When utility layouts are required as part of a plat, the location and extent of sidewalks within the subdivision shall be shown on the utility layout and shall be subject to the approval of the Director of Public Works and the utility agencies.

(8) Drain Crossings

Pedestrian double rails shall be required on both sides of all sidewalk drain crossings.

(9) Grade

Sidewalks shall be constructed so as to align vertically and horizontally with adjoining sidewalks.

(10) Sidewalks on Private Streets.

Sidewalks on private Streets shall meet the same criteria as for public Streets. Sidewalks shall be included in the same lot as the private Streets or within an access easement designated on the plat if located on private lots. Deed restrictions shall be required to ensure that sidewalks remain unobstructed.

(r) Access and Driveways

(1) Applicability

The provisions of this section shall apply to all Driveways. A lot which is a part of an approved Plat which does not otherwise limit access and which was approved by the city and filed for record as of the effective date of this Section, and which does not have sufficient frontage to meet the driveway approach spacing requirements in this section, shall be allowed one driveway approach.

(2) Single-Family Residential Subdivisions

Where a subdivision abuts a major thoroughfare, lots for single-family residential use in the ETJ or in residential zoning districts shall not front on the thoroughfare, the sole exception shall be lots greater than one (1) acre in size which provide for permanent vehicular turn around on the lot to prevent backing onto the thoroughfare and this restriction should be noted on the plat.

Access points which would permit vehicular access to such lots less than one acre in size from the thoroughfare shall be prohibited. However, if conditions are such that vehicular access to such lots cannot be provided other than from the collector or arterial street, the Director of Public Works may permit the creation of a marginal access street or easement to serve two (2) or more lots. The marginal access street or easement shall be designed to permit entry to the thoroughfare without requiring a motorist to execute a backing maneuver. Marginal access streets or easements shall be included on the subdivision plat.

(3) Commercial, Industrial And Medium Or High Density Residential Developments

Lots in commercial, industrial and medium or high-density residential developments in the ETJ or in the MF, NC, O, C, I-1, or I-2 zoning districts may have vehicular access from a thoroughfare. However, the number of access points permitted will be based on the following criteria: (A) for lots with less than two hundred (200) feet of frontage, one (1) access point may be permitted; (B) for lots with a frontage of two hundred (200) feet or more, one access point for every 200 feet of frontage will be permitted. Driveway spacing will be in accordance with subsection (7) below, if applicable. All lots in NC, O, and C zoning districts with less than 400 feet fronting an arterial Street shall provide for shared cross access with adjacent lots fronting the arterial, by means of platted common access easement across the lot or recorded deed covenant providing common access across the lot with adjacent lot(s).

(4) Additional Access Points

The Director of Public Works (or Texas Department of Transportation, or county authority, if appropriate) is authorized to permit additional access points under the following conditions: (A) the additional land; and access points are necessary to ensure the property owner beneficial use of the land; and (B) the resulting additional ingress and egress of vehicles will not seriously disrupt the flow of traffic on the thoroughfare.

(5) Location of Access Points

The specific location of access points will be determined by the Director of Public Works (or by the Texas Department of Transportation or county authority, if appropriate) at such time as a site plan is reviewed prior to the issuance of a building permit. The location shall be based on the following criteria: (A) the location shall minimize conflicts with vehicle turning movements; (B) the location shall be located as far as practicable from intersections; and (C) the location shall be not less than fifty (50) feet from another driveway location. If this standard is not possible, based upon the frontage of the property, the location shall be directed as far as practicable from the other driveway locations. Driveways along an arterial within 400 feet of a major intersection, such as the intersection of two arterial streets or the intersection of a collector and an arterial street, may be restricted to right turn movements.

(6) Driveway Throat or Vehicle Storage Length

For purposes of this Subsection, "Throat Length" means the length of extending from the entry into the site to the first left-turn conflict or intersection with a parking aisle. Vehicle Storage Length means the length of a driveway, service lane, bay, or other passageway for motor vehicles which is designed to minimize queuing onto surrounding Streets. Throat Length shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation. Throat Length and Vehicle Storage Length shall not be less than the standards set forth in Table 506-7 unless approved by the Director of Public Works. These measures generally are acceptable for the principle access to a property and are not intended for minor driveways.

**Table 506-7
Minimum Driveway Throat Lengths**

Throat Length or Vehicle Storage Length	
Shopping Centers > 200,000 GLA	Throat Length 200'
Developments < 200,000 GLA not otherwise enumerated in this Table	Throat Length 75'
Unsignalized driveways not otherwise enumerated in this Table	Throat Length 40' minimum
Residential subdivision entryway (Private, gated entries)	Poisson distributed probability model at a 95% confidence level. In addition, the subdivider shall provide for vehicle turnaround capability based on the single unit design vehicle as provided in the 1990 AASHTO Green Book, or latest revision thereof. The minimum entryway vehicle storage length shall be forty (40) feet.
Single-lane drive-in banks	Sufficient to accommodate minimum queue of six (6) vehicles
Drive-in banks with more than one (1) lane	Sufficient to accommodate minimum queue of four (4) vehicles per service lane
Single-lane drive-through car washes	Sufficient to accommodate minimum queue of twelve (12) vehicles
Automatic or self-serve car washes with more than one bay	Vehicle storage of 60 feet per bay
Fast-food restaurants with drive-in window service	Sufficient to accommodate minimum queue of eight (8) vehicles per service lane
Gasoline service stations with pump islands perpendicular to the pavement edge	Minimum 35 feet between pump islands and right-of-way

Commentary: The throat lengths in Table 506-7 are provided to assure adequate stacking space within driveways for general land use intensities. This helps prevent vehicles from stacking into the thoroughfare as they attempt to access the site. High traffic generators, such as large shopping plazas, need much greater throat length than smaller developments or those with unsignalized driveways. These standards refer to the primary access drive.

(7) Spacing and location on major thoroughfares

This subsection applies to driveway approach spacing and location along major thoroughfares.

- A. Where a Traffic Impact Analysis is required, driveways shall be spaced in such a manner as to avoid reducing the traffic LOS below that established in the Section 35-502 Traffic Impact Analysis.
- B. Along either side of any corner commercial or industrial property the driveway approaches shall be located so as to maintain a minimum distance from the corner of the intersecting roadways equal to 90 percent of the length of the property along the roadway upon which the proposed driveway approach is to be located, or 125 feet, whichever distance is less.

(8) Alignment

Major Driveway approaches, with Peak Hour Trips greater than 100 pht, accessing major thoroughfares shall attempt to meet the following guidelines:

- A. Align with opposing driveway approaches if any, or shall be offset by 175 feet or more to provide adequate left turn storage capacity in advance of each driveway approach and to avoid the overlap of left turn lanes.
- B. Shared among different property owners or users when necessary to maintain minimum spacing requirements.
- C. Planned, when possible, to match existing openings in medians. In addition, no cuts through the left turn reservoir of a median shall be permitted in order to provide left turn movements for driveway approaches accessing major thoroughfares.

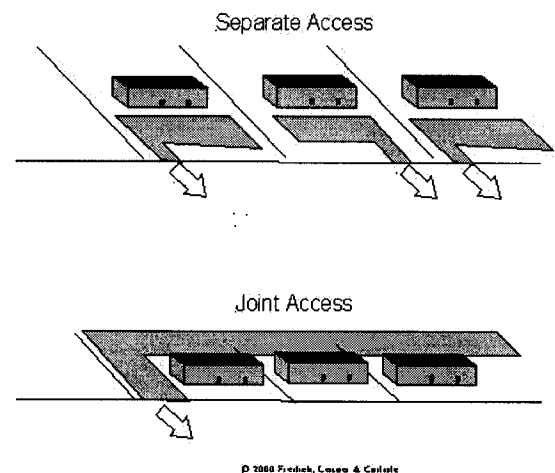


Figure 506-10

(9) Parking Approaches

Parking aisles shall be located a minimum of twenty (20) feet from the intersection of the driveway approach and the Thoroughfare.

(10) Driveway Approaches

Driveway approach materials may be asphalt, concrete or other materials as approved by the Director of Public Works.

(s) Gated Subdivision Streets

(1) Pavement Management

The Applicant shall include with the Homeowners Association (HOA) documents a forecast and schedule of Street maintenance costs prepared by a licensed professional engineer, licensed as such by the State of Texas. A Maintenance Account with seed money shall be established by the developer to enable the HOA to meet the maintenance schedule until the HOA is self sufficient. Any HOA requesting that the City acquire their private Streets shall produce documentation that the maintenance schedule set forth in the HOA's original Pavement Management Plan as part of the HOA documents has been followed.

(2) Fire Lanes

The HOA documents shall require the HOAs to identify and enforce a no parking restriction in fire lanes throughout the community.

(3) Master Key Security System

A master key security system shall be provided on all gates. The security system shall include the following:

- A. a gate override in case of power failure; and
- B. a master key provided to the Fire Department, the School District, and Police Department; or
- C. a Knox Box.

(4) Queuing

At gated entrances where traffic can queue into public streets, the gates and entrances design must provide for sufficient storage capacity such that a poisson distributed probability model (95% confidence level) shows that no queuing vehicles will queue into the public street. The entryway, including the paved surface area lying between the Street providing access to the subdivision and the gates, shall include a turning radius of not less than forty (40) feet.

(5) Connectivity

The street system shall comply with the connectivity standards (Subsection (e) of this Section).

(t) Traffic Calming

The purpose of this Section, along with § 35-515(b)(4) (Lot Layout Standards—Block Length and Perimeter) of this Article, is to protect the public health, safety and general welfare by ensuring that speeds on local Streets are suitable for their intended purpose. The City hereby finds and determines that long blocks, wide Street cross-sections and uninterrupted traffic flows can encourage speeding on local Streets. Accordingly, these design standards will slow traffic

on local Streets while allowing flexibility in design and offering Applicants the choice of treatment that works best for the Streets in a Proposed Development.

(1) **Applicability**

The provisions of this subsection shall apply to Local Streets

(2) **Street Lengths**

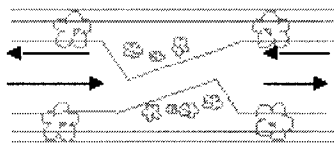

The length of Street Links shall comply with the block length standards established in § 35-515(b)(3) 35-515(b)(4) of this Chapter.

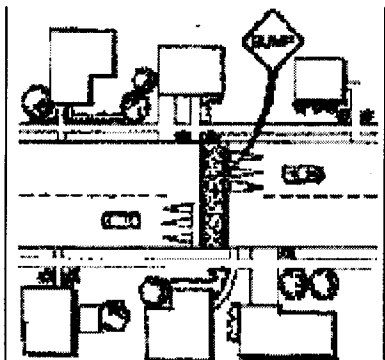

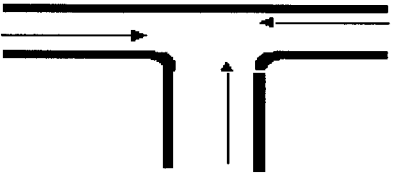
(3) **Traffic Control Calming Features**

A longer Street length may be allowed through the placement of an approved traffic calming feature at a location which produces an unimpeded length of the Street Link which does not exceed the block length standards (§ 35-515(b)(4)).

Table 506-8 The following provisions describe and establish standards for permitted traffic calming devices where traffic calming measures are permitted as part of the roadway design elements in subsection B, above. The descriptions in Table 506-8 set forth herein are described in the document entitled R. Ewing, Traffic Calming: State of the Practice (Institute of Transportation Engineers (ITE) and the Federal Highway Administration (FHWA), 1999), which document is hereby incorporated by this reference. Traffic calming options for Locals and Collector Streets are noted below:

Table 506-8

APPROVED TRAFFIC CONTROL DEVICES & DESCRIPTION	
<p>Neckdowns/ Flares / Street Narrowing / Intersection Throating. Neckdowns are curb extensions at intersections that reduce roadway width curb to curb. They are sometimes called slow points, nubs, bulbouts, knuckles, or intersection narrowing. These traffic control measures reduce the width of a section of roadway in a gradual manner. They shorten crossing distances for pedestrians and drawing attention to pedestrians via raised peninsulas. By tightening curb radii at the corner, the pedestrian crossing distance is reduced and the speeds of turning vehicles are reduced. The effect of this measure is to reduce speed and discourage non-local traffic. Motorists react to this measure with slower speed because of a concern of a limited travel path.</p>	
<p>Roundabouts / Traffic Circles. are raised circular structures constructed at a three-way or four-way intersection. Its objectives are to slow speeding and reduce the number and severity of vehicular accidents. This measure is most suitable for wide intersections and may accommodate all size vehicles by applying appropriate engineering designs.</p>	

APPROVED TRAFFIC CONTROL DEVICES & DESCRIPTION	
<p>Speed Humps are raised pavement features constructed across the width of the street. The speed hump shall be 3 inches high and 12 feet in length from the leading edge to the trailing edge. This feature discourages motorists from speeding and encourages them to obey the posted speed limit. When speed humps are constructed, advisory signs shall be installed to notify motorists of the speed hump and an appropriate advisory travel speed.</p>	 <p>© 1995 Institute of Transportation Engineers. Used by permission.</p>
<p>Median Islands are raised circular landscaped areas located within non-intersection, midblock locations. Median islands <u>channelize</u> traffic and separate opposing flows. Traffic must slow down to maneuver around a median island. Median islands offer landscaping opportunities and maintenance responsibility. Median islands can be used to protect existing trees. <u>See Figure 506-12.</u></p>	
<p>"T" intersections are at-grade intersections where one of the intersecting Street Links is perpendicular to the other two. Traffic must slow down to negotiate the turning maneuvers in a T-intersection. This roadway feature is very common. Motorists are familiar with T-intersections.</p>	

(4) Maintenance

Maintenance of landscaping associated with traffic calming features shall be the sole responsibility of the homeowner's association.

* * * * *

Chapter 35, Article V, Section 35-507 is amended as follows:

35-507 Utilities

* * * * *

(a) Applicability

The provisions of this chapter shall apply to all persons, and political subdivisions of the state, designing or installing or causing to be designed or installed the following within the corporate limits of the city or within the city's extraterritorial jurisdiction, as that term is defined by the Municipal Annexation Act, compiled as V.T.C.A., Local Government Code § 42.001 et seq.:

- (1) sanitary sewers
- (2) storm sewers
- (3) water transmission or distribution lines
- (4) electric power lines
- (5) telephone lines
- (6) natural gas lines
- (7) cable television lines
- (8) recycled water lines

* * * * *

(d) *Water, Wastewater and Recycled ~~Reecyle~~ Water Systems.*

(1) *Generally*

All subdivisions within the city and its extraterritorial jurisdiction shall be provided with water and wastewater systems. Water, wastewater, and recycled ~~reecyle~~ water systems shall be installed in accordance with the utility service provider's ~~San Antonio Water System's~~ "Utility Service Regulations."

Chapter 35, Article V, Development Standards, Section 35-508 is amended as follows:

35-508 *Impact Fees*

(a) *Authority.*

This article is adopted pursuant to V.T.C.A., Local Government Code, Chapter 395 and shall not limit the city's authority to impose additional impact fees or charges if such impact fees or charges are specifically authorized by state law and duly adopted by ordinance.

(b) *Effect on other parts of this code.*

This article shall not limit the permissible use of property, density of development, design and improvement standards and requirements, or any other aspect of the development of land or provision of capital improvements subject to the zoning, subdivision, and other regulations set forth in this code.

(c) *Additional requirement*

Impact fees are additional and supplemental to, and not in substitution of, any other requirements imposed by the city on the development of land or the issuance of building permits.

(d) *Water and Wastewater service.*

Impact fees ~~for water service~~ are governed by the utility service provider's "Utility Service Regulations" San Antonio Water System's Regulation which are incorporated by reference into Chapter 35 (Unified Development Code) of the City Code of San Antonio, Texas ~~adopted as a part of this article.~~

Chapter 35, Article V, Development Standards, Section 35-526 is amended as follows:

35-526 *Parking & Loading Standards*

* * * * *

(a) *General requirements*

The off-street parking facilities required by this article shall be provided for all uses except where otherwise indicated by this Section. One specific exemption provided by this section is that areas zoned "D" Downtown District shall be exempt from the off-street parking facility provisions. The location, design, and number of spaces shall conform to the provisions of this Section. In the event a use is enlarged or expanded, the amount of off-street parking facilities that would be required if the increment were a separate use shall be provided.

(b) *Table of off-Street parking requirements*

- (1) Table 526-3 establishes the minimum number of parking spaces required, the maximum number of parking spaces permitted, and the minimum number of bicycle spaces required, for the uses indicated. Applicants are entitled to a reduction in the minimum parking requirements of Table 526-3 pursuant to § 35-523(f)(2) of this Code to help meet the minimum tree preservation requirements.
- (2) Where the parking variable indicated in Table 526-3 is the number employees, the parking requirements shall be based on the largest shift rather than the total number of employees.
- (3) Where the parking variable indicated in Table 526-3 is square footage, the square footage shall not include any floor area accessory to a retail use ~~which is~~ devoted exclusively to storage or employee training.
- (4) For the purposes of parking calculations, the gross area of any parking garage within a building shall not be included within the Gross Floor Area of the building.
- (5) Structured Parking and Pervious Pavement shall not be subject to the maximum parking requirements.
- (6) The Administrator may waive up to fifty percent (50%) of the minimum parking spaces required by Table 526-3 upon a written finding that the waiver will result in the preservation of woodlands or significant stands of trees in a natural state, or that the waiver will further a public purpose established in the Master Plan.

Table 526-3A Parking in Residential Use Districts "Table 526-3a "Residential"

Permitted Use	Minimum Vehicle Spaces	Maximum Vehicle Spaces
ACCESSORY USES (SUPPLEMENTAL TO THE RESIDENTIAL USE)	N/A	N/A
ASSISTED LIVING OR ELDERLY HOME	0.3 per room	1 per room

* * * * *

Table 526-3B
Parking in Non-Residential Use Districts ~~**Table 526-3b "Non-Residential"**~~

	Permitted Use	Minimum Vehicle Spaces	Maximum Vehicle Spaces
* * * * *			
HOUSING	HOUSING - multifamily dwellings , extended stay hotel or timeshares	1 per unit	1.9 per unit
* * * * *			
WAREHOUSE	OFFICE WAREHOUSE (FLEX SPACE) - outside storage not permitted	1 per 2,000 4,000-sf GFA	1 per 200 sf GFA
WAREHOUSING	WAREHOUSING	1 per 5,000 600 sf GFA	1 per 350 sf GFA
* * * * *			

* * * * *

Chapter 35, Appendix A, Definitions & Rules of Interpretation, Section 35-A101 is amended as follows:

Appendix A: Definitions & Rules of Interpretation

* * * * *

Accessory Use Regulations

See §35-370 ~~35-360~~ of this Chapter.

* * * * *

All Weather Surface (parking and vehicular access)

Vehicular "all weather surfaces" shall constitute: poured concrete on prepared subgrade; hot laid asphalt on a prepared base course; single, double, or triple asphalt surface treatment (consisting of applications of asphaltic material, each covered with aggregate) on a prepared base course. Brick/concrete block/tile/flagstone set in mortar or on a prepared base course. The Director of Development Services shall determine if other materials may fit within this category of surface however in no case shall a material be considered a "all weather surface" if such surface generates or produces any dust or particulate matter that could be airborne to adjacent properties such as occurs with compacted base materials.

All Weather Surface (pedestrian walkways and access)

All weather surfaces shall constitute poured concrete, hot laid asphalt, or tile/flagstone/brick/concrete block. The Director of Development Services shall determine if other materials may fit within this category of surface. For pedestrian application crushed granite, marble and rock slag may be considered an "all weather surface".

* * * * *

All Weather Surface (temporary access)

All weather surfaces for temporary construction access or event access such as "homes shows", carnivals, etc. shall be permitted by the Director of Development Services and may be poured concrete, hot or cold laid asphalt or tile/brick/flagstone/concrete block, compacted base material, crushed granite, or gravel for a period not to exceed 120 days.

* * * * *

Ancillary Use

An ancillary use shall be a use limited to providing a service and/or product for the needs of onsite tenants. Ancillary uses shall not generally serve the public or non-tenant customers.

* * * * *

Bus Maintenance Facility

A facility designed to provide services to a fleet of buses such as public transit operations, school districts, charter services and commercial bus companies. The facilities must comply with all environmental regulations, health and life safety codes and may contain administrative offices, mechanical repair shops, fueling stations, body and repair shops, painting, shops, vehicle storage and other operations normally associated with the operation and maintenance of a fleet of buses.

* * * * *

Bus Storage Facility

A facility designed to provide parking and storage services to a fleet of buses for such uses as public transit operations, school districts, charter services and commercial bus companies. The facilities must comply with all environmental regulations, health and life safety codes and may contain administrative offices, but shall exclude such activities as mechanical repair shops, fueling stations, body and repair shops, painting shops, and other operations normally associated with the maintenance of a fleet of buses.

* * * * *

Dance Hall

A facility with more than 2,000 square feet of building area excluding kitchen, restrooms and storage areas used for the purpose of providing a fully enclosed dancing area for the general public whether by free admission, by admission fee, or by reservation. Noise generated by the music and/or employees and customers shall not exceed the decibel limits set forth by the city noise ordinance (City Code of San Antonio, Texas, Chapter 21, Article III, Noise).

* * * * *

Nightclub

A tavern with more than 2,000 square feet of building area excluding kitchen, restrooms and storage areas. A nightclub use may include, in addition to the provision of alcohol, a dance hall, a dance floor, food services, live bands, disk jockey and or live entertainment.

* * * * *

Subdivision Recreational Facilities

Facilities (swimming pools, recreational courts, restrooms, clubhouse, mechanical rooms) located within a subdivision for the primary use of the residents of the subdivision with no more than 20% of its use being by non-residents of the subdivision.

* * * * *

Tavern

Any use in which 75% or more of gross revenue is derived from the on-premise sale and consumption of alcoholic beverages. A tavern use may include, in addition to the provision of alcohol, a dance floor, food services, live bands, disk jockey and or live entertainment.

~~Any use in which the primary purpose is the sale of alcoholic beverages for on-premises consumption which may or may not include dancing.~~

* * * * *

Utilities Standards

See §35-507 ~~35-514~~ of this Chapter.

* * * * *

Chapter 35, Appendix B, Application Submittal, Section 35-B106 is amended as follows:

* * * * *

35-B106 Floodplain Development Permit

(a) Number of Copies

The applicant shall furnish two (2) sets of documents as provided herein.

(b) Format

The Application for a Floodplain Development Permit shall be drawn to scale showing the locations, dimensions, and elevations of proposed structures, and the location of the foregoing in relation to areas of special flood hazard.

(c) Contents

The Floodplain Development Permit application shall include the following information:

- (1) An Elevation Certificate for buildings on property located in or abutting the floodplain.
- (2) Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed.
- (3) Certification from a registered professional civil engineer or registered architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of section 35-505(n).

- (4) An existing structure may be improved (remodeled) without conforming to requirements of this subdivision when the improvement does not constitute a Substantial Improvement. In the event that the work is considered a Substantial Improvement then the structure must be brought into compliance with this subdivision.
- (5) Certification of the fair market value of an existing structure prepared by a certified real estate appraiser and a cost estimate of proposed improvements to the structure prepared by a registered architect or registered professional engineer shall be submitted to verify whether or not the proposed improvements exceed fifty (50) percent of the fair market value of the existing structure. In the case of a structure that has suffered damage, the date will verify the fair market value of the structure before the damage occurred.
- (6) The information provided on the San Antonio Flood Plain Submittal Checklist (below).

City of San Antonio Flood Plain Submittal Checklist – 2 SETS UNLESS NOTED.

1. () Vicinity Map
2. () Show the location of the proposed development on current flood insurance rate map.
3. () U.S.G.S. Quadrangle maps showing overall drainage areas, runoff coefficients, time of concentration, intensity.
4. () Place the following note on the plat "NO CONSTRUCTION, IMPROVEMENTS, OR STRUCTURES ARE ALLOWED WITHIN THE DRAINAGE EASEMENT/100 YEAR FLOOD PLAIN."
5. () Drainage easement dedicated based on the higher of the 25-year ultimate development plus required freeboard or the 100-year ultimate development condition water surface elevation.
6. () Plan view of project limits showing cross sections, existing/proposed topography, proposed development, existing and ultimate flood plain limits.
7. () Channel cross sections (existing superimposed on proposed) on 24"x36" plan sheet (drainage easement limits, Manning's numbers, property lines, structures, etc.)
8. () Hydrology to include details of:
 - A. Detailed Time of concentration/Lag time calculations
 - B. CN Value (Soil Survey for the SCS Curve Number by Soil type (amount in acres of each hydrologic soil group)
 - C. Soil Survey for the SCS Curve Number by Soil Type (amount in acres of each hydrologic soil group)
 - D. Percent impervious cover for a) existing b)with project condition c) ultimate condition
 - E. Drainage areas
 - F. Maps as necessary to support calculations
 - G. Discharge calculations
9. () 25 year ultimate development plus required freeboard condition hydrologic and hydraulic analyses – Hard copy
10. () 100 year existing and ultimate development condition hydrologic and hydraulic analyses – Hard copy
11. () 10, 50, 100, and 500 year analysis for map revision detail study areas ONLY
12. () A 3 ½" diskette of all the existing and proposed condition HEC-1 and HEC-2 models used in analysis
13. () Is this development over the Edwards Aquifer Recharge Zone?
14. () Flood Plain Development Permit Application (1 COPY ONLY)
15. () Plotted water surface profiles for item number 8, 9, and 10 (if applicable)
16. () Grading Plan (existing and finished contours)
17. () Show revised (calculated from hydraulic run) flood plain limits on current flood insurance rate map (must tie in upstream and downstream)
18. () Elevation Certificates if Applicable
19. () Completed CLOMR/LOMR forms
20. () Narrative (Per section ~~35-B119(d)~~ ~~35-B213~~ of UDC)
 - A. Table of Contents and abstract or executive summary
 - B. Introduction that includes project description and history, location, scope and objective of analysis, previous and related studies that may affect this analysis.
 - C. Summary, conclusions, and recommendations (water surface elevation impacts)

I certify that all the items listed on the attached flood plain submittal checklist are included with this document.

Project Name: _____

Plat No. _____

Consulting Engineer: _____

Consultant Signature: _____ Date: _____

Registration Stamp

* * * * *

Chapter 35, Appendix B, Application Submittal, Section 35-B118 is renumbered as follows:

35-B119 ~~35-B118~~ Stormwater Management Plan

* * * * *

(a) (b) Number of Copies

The Applicant shall provide two (2) blue-line or black-line copies of the plat together with two (2) of construction drawings.

(b) ~~(f)~~ *Format*

* * * * *

(c) ~~(g)~~ *Contents*

* * * * *

(d) ~~(h)~~ *Report*

* * * * *

(e) ~~(i)~~ *Certification*

* * * * *

Chapter 35, Appendix B, Application Submittal, Section 35-B121 is amended as follows:

* * * * *

35-B121 Subdivision Plat Applications

* * * * *

(e) Certification and Forms

* * * * *

(18) Form S: Street Right of Way Dedication within the ETJ

***STREET RIGHT-OF-WAY DEDICATION
WITHIN THE EXTRATERRITORIAL JURISDICTION
OF THE CITY OF SAN ANTONIO***

DATE: _____

GRANTOR(S): _____

GRANTOR'S MAILING ADDRESS:

STREET

CITY, STATE, ZIP CODE

TRUSTEE: COUNTY OF BEXAR, TEXAS
100 DOLOROSA

SAN ANTONIO, TEXAS 78205

Should the property made the subject of this instrument be annexed or otherwise incorporated into the city limits of the City of San Antonio, the trustee shall be the City of San Antonio.

CONSIDERATION: EXEMPTION FROM PLATTING REQUIREMENTS TO SHOW RIGHT-OF-WAY DEDICATION AS OTHERWISE REQUIRED BY THE CITY CODE OF THE CITY OF SAN ANTONIO.

Grantor, for and in consideration of the consideration as stated above, dedicates to the use of the public the property as described by metes and bounds in Exhibit "A", attached hereto and incorporated herein for all purposes, for all public street right-of-way uses. Grantor does hereby bind Grantor and all of Grantor's heirs, assigns and successors to warrant and forever defend all and singular such property unto the Grantee against every person or entity claiming the same or any part thereof, by, through and under Grantor, but not otherwise. Grantor further acknowledges and accepts for such consideration the responsibility for the maintenance and safety and all costs related thereto of such property until such time as it actually is used for a public street right-of-way purpose.

If no reasonable progress towards the utilization of the property for a public street right of way is made within twenty (20) years from the filing date of this instrument, this instrument and its dedication of such property for a public street right-of-way use shall be void.

When the context requires, singular nouns and pronouns include the plural.

GRANTOR(S)

STATE OF TEXAS
COUNTY OF BEXAR

*This instrument was acknowledged before me this ____ day of _____
in the year _____, by grantor(s) _____
_____.*

Notary Public -- State of Texas

This dedication instrument has been submitted to and considered by the Planning Commission of the City of San Antonio, Texas and is hereby approved by such Commission.

Dated this _____ day of _____ in the year _____

BY _____

CHAIRMAN

BY _____

SECRETARY

Chapter 35, Appendix D, Zoning District Conversion Matrix, is amended as follows:

35-D101 General

~~The following table converts the zoning classification of land that is in one of the following zoning classifications to the zoning classifications established by this Chapter. Column (C) of Table D-1 designates the zoning classifications established by Article 3 of this Chapter.~~

(a) “1965 Zoning Districts”

The zoning classifications established by the City subsequent to June 28, 1965 and prior to February 4, 2002 are referred to herein as “1965 Zoning Districts.” Application of the Zoning District Conversion Matrix shall be as follows:

(1) Properties that are registered. Any property that is registered shall be subject to the following provisions:

A. Registered Uses Recognized. The implementation of the Zoning District Conversion Matrix notwithstanding, the reservation and preservation of the right to continue to use, or establish a single future use of, property as was authorized by the zoning regulations in effect prior to the adoption of this Zoning District Conversion Matrix is hereby recognized provided that such property is registered with the City of San Antonio’s Department of Development Services.

B. Registration Process. Registration shall be accomplished by sending notice of the legal description of the property, a description of the particular use right (such as retail sales, multifamily housing, or manufacturing) to be reserved, and the property’s 1965 zoning designation to the Director of Development Services by certified mail with payment of the \$50.00 registration fee. A blanket registration of all or several prior use rights shall not be accepted by director.

C. Reserved Use. A use registered in the manner prescribed immediately above shall be referred to as a “reserved use.” The registration of a reserve use shall have the effect of preserving the subject property’s 1965 zoning designation to the extent necessary in order to recognize the property owner’s right to continue or establish the reserved use. As is the predominate rule of zoning such rights run with the land.

D. Rezoning. The registration of a reserve use shall in no way preclude the initiation of a zoning case. Should a zoning case be initiated on a registered property, which is ultimately approved by City Council, then in that case any rights derived pursuant to the registration procedures of this section shall expire and be a nullity, and the new regulations, including those relating to non-conforming rights, applicable to the new zoning shall apply.

(2) Properties that which are not registered. Any property that which is not registered shall be subject to the following provisions:

Property designated as located within a “1965 Zoning District”, as set forth in Column (A) of Table D102-1 ~~D-1~~, shall be deemed to be located in the zoning classification shown in Column (C) of Table D102-1 ~~D-1~~ unless otherwise noted.

(3) Registration Period.

- A. Upon the third anniversary of the effective date of the Zoning District Conversion Matrix the right of an owner of registered property to establish a future use shall expire and be a nullity.
- B. Any property to which this Appendix D subsection (a) applies that is not registered on or before the expiration date described immediately above shall be subject to the provisions of this Appendix D subsection (a) 2.
- C. Any property to which this Appendix D subsection (a) applies that is registered on or before the expiration date described immediately above shall be subject to the provisions of this Appendix D subsection (a) 1.

(b) “1938 Zoning Districts”

The zoning classifications established by the City prior to June 28, 1965 are referred to herein as “1938 Zoning Districts.” Application of the Zoning District Conversion Matrix shall be as follows:

(1) Properties that are registered. Any property that is registered shall be subject to the following provisions:

- A. Registered Uses Recognized. The implementation of the Zoning District Conversion Matrix notwithstanding, the reservation and preservation of the right to continue to use, or establish a single future use of, property as was authorized by the zoning regulations in effect prior to the adoption of this Zoning District Conversion Matrix is hereby recognized provided that such property is registered with the City of San Antonio’s Department of Development Services.
- B. Registration Process. Registration shall be accomplished by sending notice of the legal description of the property, a description of the particular use right (such as retail sales, multifamily housing, or manufacturing) to be reserved, and the property’s 1938 zoning designation to the Director of Development Services by certified mail with payment of the \$50.00 registration fee. A blanket registration of all or several prior use rights shall not be accepted by director.
- C. Reserved Use. A use registered in the manner prescribed immediately above shall be referred to as a “reserved use.” The registration of a reserve use shall have the effect of preserving the subject property’s 1938 zoning designation to the extent necessary in order to recognize the property owner’s right to continue or establish the reserved use. As is the predominate rule of zoning such rights run with the land.

- D. Rezoning. The registration of a reserve use shall in no way preclude the initiation of a zoning case. Should a zoning case be initiated on a registered property, which is ultimately approved by City Council, then in that case any rights derived pursuant to the registration procedures of this section shall expire and be a nullity, and the new regulations, including those relating to non-conforming rights, applicable to the new zoning shall apply.

(2) Properties that which are not registered. Any property that which is not registered shall be subject to the following provisions:

Property designated as located within a "1938 Zoning District", as set forth in Column (B) of Table D102-1 D-1, shall be deemed to be located in the zoning classification shown in Column (C) of Table D102-1 D-1 unless otherwise noted.

(3) Registration Period.

- A. Upon the third anniversary of the effective date of the Zoning District Conversion Matrix the right of an owner of registered property to establish a future use shall expire and be a nullity.
- B. Any property to which this Appendix D subsection (b) applies that is not registered on or before the expiration date described immediately above shall be subject to the provisions of this Appendix D subsection (b) 2.
- C. Any property to which this Appendix D subsection (b) applies that is registered on or before the expiration date described immediately above shall be subject to the provisions of this Appendix D subsection (b) 1.

(c) Development Preservation Rights (DPR) Non-conforming Rights

Land uses legally existing as of the effective date of this Chapter which do not conform with the uses permitted in the new district to which they have been placed shall have development preservation rights (DPR) non-conforming rights pursuant to Article VII, Division 1 of this Chapter. Existing uses meeting this criterion ~~criteria~~ shall be eligible to obtain building permits for rebuilding and expansion if said use was legally operating within the past twelve months at the time of application for said permit. If the use has been discontinued for twelve consecutive months following the adoption of this chapter the owner of said property may:

- (1) Apply for a certificate of occupancy and/or building permit as required by this chapter for one of the permitted uses granted by the zoning districts established by this Chapter (see Article 3, § 35-311), or
- (2) Submit a request for reinstatement of development preservation rights non-conforming rights where the enforcement of this Chapter would result in unnecessary hardship, and where the spirit of this Chapter is observed and substantial justice is done; or
- (3) Submit an application for rezoning to another zoning district.

Development preservation rights exist in addition to non-conforming rights and no provision of this section shall be construed to remove any non-conforming rights granted to a property pursuant to Article VII of this code.

(d) Apartments in former B-1 and B-2 zoning districts

Notwithstanding any provision of this Chapter to the contrary, Multifamily Dwellings are a permitted use for any tract or parcel zoned “B-1,” “B-2,” or “B-2NA” prior to the adoption date of this Chapter so long as such tract is not the subject of rezoning in accordance with the provisions of this Chapter and remain within the “C-1,” “C-2” or “C-2NA” zoning districts.

(e) Height limitations in former O-1 districts

Notwithstanding any provision of this Chapter to the contrary, the height limitation on any tract or parcel zoned “O-1” prior to the adoption date of Chapter shall be subject to a thirty-five (35) foot height limitation until such tract is rezoned through a public hearing.

35-D102 Zoning District Conversion Matrix

The following table converts the zoning classification of land that is in one of the following zoning classifications to the zoning classifications established by this Chapter. Column (C) of Table D102-1 designates the zoning classifications established by Article 3 of this Chapter.

Table D102-1
Zoning District Conversion Matrix

(A) 1965 Zoning District	(B) 1938 Zoning District	(C) New Classification
--	--	CS, RM-4, RM-6, MF-25, MF-40, MF-50, NC, O-1, L
R-8A	--	RE
R-8	--	R-20
R-1C	--	NP-15
R-A	--	R-20
R-1B	--	NP-10
R-1A	--	NP-8
R-7	B	R-4
R-3	C, D Apartment	MF-33
R-1	--	R-6
R-5	A	R-5
R-2, R-2A, R-6	--	RM-4
R-4	--	Manufactured Home "MH"
O-1	E	O-2
B-1	--	C-1 (subject to subsection (d), above)
B-2	F, G, GG	C-2 (subject to subsection (d), above)
B-2NA	--	C-2NA (subject to subsection (d), above)
B-3	H, HH	C-3
B-3NA	--	C-3NA
B-3R	--	C-3R
B-4	--	D
BP	--	BP
I-1	I, II, J, JJ, K, KK	I-1
I-2	L, LL, M, MM	I-2
Sand & Gravel "SG"	--	Sand & Gravel District "SG"
Quarry "QD"	--	Quarry District "QD"
Entertainment "ED"	--	Entertainment District "ED"
ERZD	--	ERZD
Historic District "H"	--	Historic District "H"
Military Airport Overlay 1 "MAO-1"	--	Military Airport Overlay 1 "MAO-1"
Military Airport Overlay 2 "MAO-2"	--	Military Airport Overlay 2 "MAO-2"
Military Reservation "MR"	--	Military Reservation "MR"
Planned Unit Development "PUD"	--	Planned Unit Development "PUD"
River Walk Overlay District "RWOD"	--	River Walk Overlay-3 "RW-3"
Temporary R-1 (see Ord. No. 65513, '§ 2(f) [8-13-87]; and Ord. No. 74489, § 1(Att. I) [10-3- 91]], § 35-3011 of former UDC	Temporary A	R-6

* * * * *

SECTION 3. All other provisions of Chapter 35 of the City Code of San Antonio, Texas shall remain in full force and effect unless expressly amended by this ordinance.

SECTION 4. Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this ordinance, for any reason be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision herein contained be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

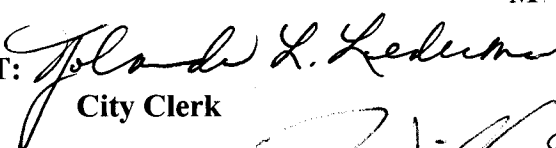
SECTION 5. Notice of these changes to the Unified Development Code shall not require the publication in an official newspaper of general circulation in accordance with Chapter 35, Article IV, Division 1, Table 403-1.

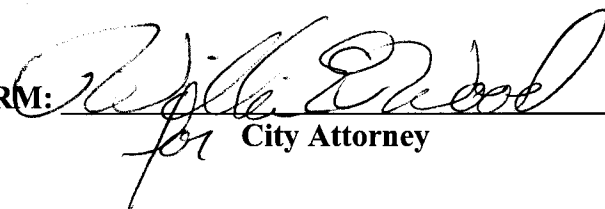
SECTION 6. The publishers of the City Code of San Antonio, Texas are authorized to

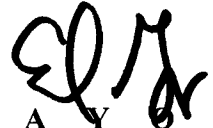
amend said Code to reflect the changes adopted herein and to correct typographical errors and to index, format and number paragraphs to conform to the existing code.

SECTION 7. This ordinance shall become effective May 11, 2003.

PASSED AND APPROVED this the 1st day of May, 2003.

ATTEST: 
City Clerk


for City Attorney


MAY 6 R
EDWARD D. GARZA